

Aaron Paul (*pro hac vice*)  
Anne Mariah Tapp (*pro hac vice*)  
Neil Levine (*pro hac vice*)  
Grand Canyon Trust  
4454 Tennyson Street  
Denver, Colorado 80212  
303-477-1486  
303-455-0604  
apaul@grandcanyontrust.org  
atapp@grandcanyontrust.org  
nlevine@grandcanyontrust.org

Travis Stills (*pro hac vice*)  
Energy and Conservation Law  
1911 Main Avenue, Suite 238  
Durango, Colorado 81301  
970-375-9231  
stills@frontier.net

Joro Walker, Esq., USB # 6676  
Western Resource Advocates  
150 South 600 East, Suite 2A  
Salt Lake City, Utah 84102  
801-487-9911  
joro.walker@westernresources.org

Attorneys for Plaintiff  
*Grand Canyon Trust*

**IN THE UNITED STATES DISTRICT COURT  
DISTRICT OF UTAH, CENTRAL DIVISION**

GRAND CANYON TRUST,  
  
Plaintiff,

v.

ENERGY FUELS INC.,  
ENERGY FUELS HOLDINGS CORP.,  
EFR WHITE MESA LLC, and  
ENERGY FUELS RESOURCES (USA) INC.,

Defendants.

) Case No. 2:14-cv-00243-CW-BCW  
)  
) **GRAND CANYON TRUST'S**  
) **MOTION FOR SUMMARY**  
) **JUDGMENT AGAINST ENERGY**  
) **FUELS RESOURCES (USA) INC.**  
) **AND EFR WHITE MESA LLC**  
)  
) **ORAL ARGUMENT REQUESTED**  
)  
) **JUDGE CLARK WADDOUPS**  
)

**TABLE OF CONTENTS**

TABLE OF AUTHORITIES ..... i

EXHIBIT LIST ..... iv

INTRODUCTION ..... 1

BACKGROUND ..... 3

I. The White Mesa Mill ..... 3

    A. How the Mill Extracts Uranium and Produces Wastes ..... 3

    B. The Mill’s Tailings Impoundments ..... 4

II. National Emission Standards for Hazardous Air Pollutants (NESHAPs) ..... 6

III. The Mill’s Operating Permits ..... 8

IV. The Mill’s Reclamation Plan ..... 9

V. Energy Fuels’ Self-Reported Subpart W Violations in 2012 and 2013 ..... 10

    A. 2012 Radon-Flux Measurements from Cells 2 and 3 ..... 11

    B. 2013 Radon-Flux Measurements from Cells 2 and 3 ..... 12

VI. The Trust’s Citizen Suit Under the Clean Air Act ..... 13

STATEMENT OF ELEMENTS AND UNDISPUTED MATERIAL FACTS ..... 15

STANDARD OF REVIEW ..... 29

ARGUMENT ..... 29

I. The citizen-suit provision of the Clean Air Act authorizes judicial relief against Energy Fuels for its Subpart W violations ..... 29

II. The Trust gave sixty days’ notice of its intent to sue. .... 30

III. The Trust has standing ..... 30

    A. Members of the Trust have suffered an injury in fact ..... 31

    B. These injuries are fairly traceable to the activities challenged in this lawsuit ..... 33

C.	The Trust’s members’ injuries are redressable. ....	34
IV.	Energy Fuels has repeatedly violated Subpart W’s numeric emission limit. ....	35
A.	Claim 1: Energy Fuels violated Subpart W by letting radon emissions from Cell 2 exceed Subpart W’s numeric limit in 2012 and 2013. ....	35
B.	Claim 5: Cell 3’s radon emissions exceeded Subpart W’s numeric limit in 2013. ....	37
C.	Claim 3: Energy Fuels violated Subpart W’s sampling-schedule requirements.....	38
D.	Claim 4: Energy Fuels violated Subpart W’s sampling methods in 2013. ....	40
V.	Claim 2: Energy Fuels has been violating Subpart W by operating more than two impoundments.....	42
A.	Cells 3 and 4A have been in “operation” since at least November 11, 2010. ....	42
B.	Cells 1 and 4B have been in “operation” since the day Energy Fuels first put “process solutions” into those cells. ....	43
C.	Cell 2 is in “operation” because its “final closure” has not begun. ....	49
D.	Roberts Pond was in “operation” until at least March 2014. ....	53
	CONCLUSION.....	54
	CERTIFICATE OF SERVICE.....	56

**TABLE OF AUTHORITIES**

**CASES**

*Chevron Oil Co. v. Barlow*,  
406 F.2d 687 (10th Cir. 1969) ..... 39

*Concerned Citizens around Murphy v. Murphy Oil USA, Inc.*,  
686 F. Supp. 2d 663 (E.D. La. 2010)..... 31, 32, 37

*Covington v. Jefferson Cnty.*,  
358 F.3d 626 (9th Cir. 2004) ..... 31, 33, 35

*Friends of the Earth v. Potomac Elec. Power Co.*,  
419 F.Supp. 528 (D.D.C. 1976)..... 37

*Friends of the Earth, Inc. v. Laidlaw Env'tl. Servs. (TOC), Inc.*,  
528 U.S. 167 (2000)..... passim

*Hall v. Norton*,  
266 F.3d 969 (9th Cir. 2001)..... 32

*Pound v. Airosol Co., Inc.*,  
498 F.3d 1089 (10th Cir. 2007) ..... 40

*Sierra Club v. Cedar Point Oil Co.*,  
73 F.3d 546 (5th Cir. 1996) ..... 33

*Sierra Club v. Env'tl. Prot. Agency*,  
762 F.3d 971 (9th Cir. 2014) ..... 33, 34

*Sierra Club v. Pub. Serv. Co. of Colo., Inc.*,  
894 F. Supp. 1455 (D. Colo. 1995)..... 37

*Sierra Club v. Tenn. Valley Auth.*,  
430 F.3d 1337 (11th Cir. 2005) ..... 30

*Sierra Club v. Tri–State Generation & Transmission Ass’n, Inc.*,  
173 F.R.D. 275 (D. Colo. 1997) ..... 33, 34

*St. Bernard Citizens v. Chalmette Refining*,  
354 F. Supp. 2d 697 (E.D. La. 2005)..... 37

**STATUTES**

42 U.S.C. § 2014(e)(2)..... 9

42 U.S.C. § 7412..... 7, 30  
 42 U.S.C. § 7602..... 29  
 42 U.S.C. § 7604..... 15, 16, 29, 35  
 Pub. L. 101-549 § 301 (Nov. 15, 1990)..... 7  
 Pub. L. 91-604 § 4(a), 84 Stat. 1685..... 7, 29  
 Utah Code Ann. § 19-5-107(3)..... 9

**RULES**

Fed.R.Civ.P. 56..... 29

**REGULATIONS**

“National Emission Standards for Hazardous Air Pollutants: Radionuclides,”  
 54 Fed. Reg. 51,654 (Dec. 15, 1989)..... passim  
 “National Emission Standards for Hazardous Air Pollutants:  
 Standards for Radon-222 Emissions from Licensed Uranium Mill Tailings,”  
 51 Fed. Reg. 34,056 (Sep. 24, 1986). ..... 7, 45  
 “National Emission Standards for Hazardous Air Pollutants;  
 Addition of Radionuclides to List of Hazardous Air Pollutants,”  
 44 Fed. Reg. 76,738 (Dec. 27, 1979)..... 7  
 10 C.F.R. § 40.31(h) ..... 9  
 10 C.F.R. Pt. 40, Appx. A..... 9, 49, 50, 51  
 40 C.F.R. § 192.32 ..... 49, 51  
 40 C.F.R. § 61.02 ..... 25, 26  
 40 C.F.R. § 61.250 ..... 15, 30  
 40 C.F.R. § 61.251 ..... passim  
 40 C.F.R. § 61.252 ..... passim  
 40 C.F.R. § 61.253 ..... passim  
 40 C.F.R. § 61.254 ..... 10, 12

40 C.F.R. Pt. 61, Appx. B (Method 115).....	passim
“Revisions to National Emission Standards for Radon Emissions From Operating Mill Tailings” 79 Fed. Reg. 25,388, 25,397 (May 2, 2014).....	46
Utah Admin. Code R313-24-4.....	9

### EXHIBIT LIST

- Exhibit 1 Transcript of Deposition of Logan Shumway, Manager, White Mesa Mill, Energy Fuels (Feb. 5, 2016) (excerpts).
- Exhibit 2 Division of Radiation Control, “Radioactive Materials License UT 1900479 Am. 7” (July 10, 2014) (produced by Energy Fuels).
- Exhibit 3 Transcript of Deposition of David Turk, Environmental Health & Safety Manager, Energy Fuels (Feb. 4, 2016) (excerpts).
- Exhibit 4 Memorandum from A. DeArcos, Environmental Scientist, Utah Air Quality Division, to J. Morris, Minor Source Compliance Section Manager, Utah Air Quality Division (June 10, 2014) (excerpts) (produced by Energy Fuels).
- Exhibit 5 Denison Mines (USA) Corp. (“Denison Mines”), White Mesa Uranium Mill: License Renewal Application, State of Utah Radioactive Materials License No. UT1900479 (Feb. 28, 2007) (excerpts) (downloaded from Utah Division of Radiation Control’s web site).
- Exhibit 6 Letter from S. Clow, Environmental Programs Director, Ute Mountain Ute Tribe, to Amanda Smith, Executive Director, Utah Department of Environmental Quality (Oct. 6, 2011) (produced by Energy Fuels).
- Exhibit 7 Google Earth image of the White Mesa Mill (Apr. 5, 2015) (exported from Google Earth).
- Exhibit 8 Letter from J. Tischler, Director, Compliance and Permitting, Denison Mines, to C. Heying, Executive Secretary, Utah Air Quality Board (Apr. 13, 2010) (excerpts) (produced by Energy Fuels).
- Exhibit 9 Transcript of Deposition of Harold Roberts, Executive V.P., Conventional Operations, Energy Fuels (Feb. 23, 2016) (excerpts).
- Exhibit 10 Energy Fuels, “White Mesa Mill Repair Report: Roberts Pond” (Dec. 2012) (excerpts) (produced by Energy Fuels).
- Exhibit 11 Letter from K. Weinel, Quality Assurance Manager, Energy Fuels, to R. Lundberg, Director, Utah Division of Radiation Control and attachments thereto (Mar. 18, 2014) (produced by Energy Fuels).
- Exhibit 12 Energy Fuels Resources (USA) Inc.’s Answers to Pl.’s Second Set of Disc. Reqs. (July 22, 2015) (excerpts).

- Exhibit 13 Energy Fuels Resources (USA) Inc.'s Supp. Answers to Pl.'s First Set of Interrogs., Reqs. for Admis., & Req. for Produc. of Docs. (May 12, 2015) (excerpts).
- Exhibit 14 Letter from D. Frydenlund, V.P. Regulatory Affairs & Counsel, to C. Garlow, Attorney-Advisor, U.S. Environmental Protection Agency (June 1, 2009) (excerpts) (produced by Energy Fuels).
- Exhibit 15 Energy Fuels Resources (USA) Inc.'s Supp. Answers to Pl.'s Second Set of Disc. Reqs. (Nov. 6, 2015) (excerpts).
- Exhibit 16 Transcript of Deposition of Energy Fuels Resources (USA) Inc. (Feb. 25, 2016) (excerpts).
- Exhibit 17 Energy Fuels Resources (USA) Inc.'s Answers to Pl.'s Third Set of Disc. Reqs. (Nov. 6, 2015) (excerpts).
- Exhibit 18 Letter from J. Tischler, Director, Permitting and Compliance, Energy Fuels, to C. Heying, Division Director, Air Quality Division (Feb. 7, 2011) (produced by Energy Fuels).
- Exhibit 19 E-mail from H. Roberts, Denison Mines, to R. Hochstein, Denison Mines (June 28, 2011) (produced by Energy Fuels).
- Exhibit 20 Division of Air Quality, "Approval Order Modification to Add a Baghouse, to Allow Alternate Fuel Usage and to Incorporate Work Practice Standards" (Mar. 2, 2011) (excerpts) (produced by Energy Fuels).
- Exhibit 21 Division of Radiation Control, "Groundwater Discharge Permit No. UGW370004" (Aug. 24, 2012) (excerpts) (produced by Energy Fuels).
- Exhibit 22 Letter from J. Tischler, Director, Compliance & Permitting, Energy Fuels, to R. Lundberg, Director, Utah Division of Radiation Control and Reclamation Plan Revision 3.2 – Final attached thereto (Jan. 28, 2011) (excerpts) (produced by Energy Fuels).
- Exhibit 23 E-mail from J. Massey, Regulatory Compliance Specialist, Energy Fuels, to B. Bird, Director, Utah Air Quality Division, and attachment thereto (May 4, 2012) (produced by Energy Fuels).
- Exhibit 24 E-mail from D. Cooper, Tellco Environmental, to D. Turk, Manager, Environmental Health & Safety, Energy Fuels, and attachments thereto (June 25, 2012) (produced by Energy Fuels).



- Exhibit 25 E-mail from K. Weinel, Quality Assurance Manager, Energy Fuels, to B. Bird, Director, Utah Air Quality Division, and attachment thereto (Aug. 3, 2012) (produced by Energy Fuels).
- Exhibit 26 Memorandum from S. Malluche, Environmental Scientist, Utah Air Quality Division, to J. Morris, Minor Source Compliance Section Manager, Utah Air Quality Division (Apr. 17, 2013) (excerpts) (received from Utah Air Quality Division in response to records request).
- Exhibit 27 E-mail from D. Cooper, Tellco Environmental, to D. Turk, Manager, Environmental Health & Safety, Energy Fuels (Sep. 11, 2012) (produced by Energy Fuels).
- Exhibit 28 E-mail from K. Weinel, Quality Assurance Manager, Energy Fuels, to B. Bird, Director, Utah Air Quality Division, and attachment thereto (Sep. 14, 2012) (produced by Energy Fuels).
- Exhibit 29 Memorandum from S. Malluche, Environmental Scientist, Utah Air Quality Division, to J. Morris, Minor Source Compliance Section Manager, Utah Air Quality Division (Apr. 3, 2014) (received from Utah Air Quality Division in response to records request).
- Exhibit 30 Memorandum from S. Malluche, Environmental Scientist, Utah Air Quality Division, to J. Morris, Minor Source Compliance Section Manager, Utah Air Quality Division (Apr. 10, 2014) (excerpts) (received from Utah Air Quality Division in response to records request).
- Exhibit 31 Letter from J. Tischler, Manager, Compliance & Licensing, Energy Fuels, to B. Bird, Director, Utah Air Quality Division (Apr. 11, 2013) (produced by Energy Fuels).
- Exhibit 32 E-mail from D. Cooper, Tellco Environmental, to D. Turk, Manager, Environmental Health & Safety, Energy Fuels (June 20, 2013) (produced by Energy Fuels).
- Exhibit 33 Letter from J. Tischler, Manager, Compliance & Licensing, Energy Fuels, to B. Bird, Director, Utah Air Quality Division (July 18, 2013) (produced by Energy Fuels).
- Exhibit 34 Letter from J. Tischler, Manager, Compliance & Licensing, Energy Fuels, to B. Bird, Director, Utah Air Quality Division (Sep. 5, 2013) (produced by Energy Fuels).

- Exhibit 35 Letter from A. Tapp, Staff Attorney, Grand Canyon Trust, to S. Antony, President & CEO, Energy Fuels (Jan. 29, 2014) (correspondence sent by the Trust to Energy Fuels).
- Exhibit 36 Letter from A. Tapp, Staff Attorney, Grand Canyon Trust, to S. Antony, President & CEO, Energy Fuels (July 29, 2014) (produced by Energy Fuels).
- Exhibit 37 Division of Radiation Control, “Radioactive Materials License UT 1900479 Am. 3” (Sep. 21, 2007) (produced by Energy Fuels).
- Exhibit 38 Declaration of Bill Hedden in Support of the Grand Canyon Trust’s Motion for Summary Judgment (Apr. 14, 2016).
- Exhibit 39 Declaration of Yolanda Badback in Support of the Grand Canyon Trust’s Motion for Summary Judgment (Mar. 11, 2016).
- Exhibit 40 Declaration of Thelma Whiskers in Support of the Grand Canyon Trust’s Motion for Summary Judgment (Mar. 11, 2016).
- Exhibit 41 Declaration of Bill Crowder in Support of the Grand Canyon Trust’s Motion for Summary Judgment (Apr. 21, 2016).
- Exhibit 42 Declaration of Ann Leppanen in Support of the Grand Canyon Trust’s Motion for Summary Judgment (Apr. 20, 2016).
- Exhibit 43 EFR White Mesa LLC’s Answers to Pl.’s Third Set of Disc. Reqs. (Nov. 6, 2015) (excerpts).
- Exhibit 44 EFR White Mesa LLC’s Answers to Pl.’s Second Set of Disc. Reqs. (July 22, 2015) (excerpts).
- Exhibit 45 Pl.’s Second Set of Disc. Reqs. to Def. Energy Fuels Resources (USA) Inc. (June 3, 2015) (excerpts).
- Exhibit 46 Pl.’s Second Set of Disc. Reqs. to Def. EFR White Mesa LLC (June 3, 2015) (excerpts).
- Exhibit 47 Letter from J. Tischler, Director, Compliance & Permitting, Denison Mines, to R. Lundberg, Co-Executive Secretary, Utah Water Quality Board (May 4, 2012) (excerpts) (produced by Energy Fuels).
- Exhibit 48 Energy Fuels, “Daily Inspection Data,” (June 20, 2012) (excerpts) (produced by Energy Fuels).

- Exhibit 49 E-mail from S. Clow, Director, Ute Mountain Ute Environmental Programs Dept., to A. Tapp, Energy Program Director, Grand Canyon Trust (Oct. 30, 2014) (correspondence received by the Trust and produced to Energy Fuels).
- Exhibit 50 Env'tl. Prot. Agency, "Final Rule for Radon-222 Emissions from Licensed Uranium Mill Tailings: Background Information Document" (Aug. 1986) (excerpts) (downloaded from Environmental Protection Agency web site).
- Exhibit 51 Excerpts of Daily Inspection Data form for the White Mesa Mill tailings-management system (July 19–20, 2009) (excerpts) (produced by Energy Fuels).
- Exhibit 52 Google Earth image marked as Exhibit 28 during the deposition of David Turk (Sep. 14, 2004) (exported from Google Earth).
- Exhibit 53 Int'l Uranium (USA) Corp., "Reclamation Plan, White Mesa Mill, Blanding, Utah – Source Material License No. SUA-1358, Docket No. 40-8681, Revision 3.0" (July 2000) (excerpts) (produced by Energy Fuels).
- Exhibit 54 Division of Radiation Control, "Safety Evaluation Report for the Denison Mines White Mesa Mill 2007 Renewal Application" (Oct. 2011) (excerpts) (downloaded from Division of Radiation Control's web site).
- Exhibit 55 Energy Fuels Resources (USA) Inc.'s Second Supp. Answers to Pl.'s Second Set of Disc. Reqs. (April. 5, 2016).
- Exhibit 56 Denison Mines (USA) Corp., "Revised Infiltration and Contaminant Transport Modeling Report, White Mesa Mill Site, Blanding Utah, Appendix J: Tailings Cell Dewatering Modeling" (Mar. 2010) (downloaded from Division of Radiation Control's web site).

## INTRODUCTION

In March 2013, Energy Fuels confessed to the State of Utah and U.S. Environmental Protection Agency (EPA) that the company had violated the federal Clean Air Act. It reported that a 67-acre radioactive waste “impoundment” at its uranium-processing mill outside White Mesa, Utah, emitted more radon-222 during 2012 than is allowed by federal standards. A year later, in March 2014, the company owned up to violating those standards a second time, once again by letting the same impoundment, called Cell 2, emit too much radon during 2013. Radon emissions in 2013 from another 71-acre impoundment at the mill, known as Cell 3, also exceeded the federal limit. But Energy Fuels, by tinkering with its radon measurements in ways the law disallows, reported a result that snuck in just below the limit.

The standards the company violated were set by EPA after it concluded that radon gas emitted from uranium-mill wastes, commonly called “tailings,” increases the risk that those living near uranium mills will get cancer, especially lung cancer. EPA’s standards are meant to keep radon levels safe by requiring uranium mills to phase out big tailings impoundments that were built before EPA adopted the standards, and then transition to using just two 40-acre impoundments that are cleaned up one-by-one as they get full. Until the old, existing impoundments are closed for good, their radon emissions are subject to a numeric limit.

Not only has Energy Fuels been violating that limit by letting Cells 2 and 3 emit too much radon, but the company also has been operating more impoundments than the radon standards allow. Indeed, more than a quarter century after EPA adopted the radon standards, Energy Fuels operates five impoundments spanning 275 acres, not one square inch of which has been completely reclaimed. And until at least March 2014, the company also got rid of wastes in

a smaller, sixth impoundment, called Roberts Pond.

In this citizen suit, the Grand Canyon Trust asserts five claims seeking injunctive relief and civil penalties for Energy Fuels' violations of the radon-emission standards. In this motion, the Trust seeks summary judgment against Energy Fuels Resources (USA), Inc. ("EFR USA") and EFR White Mesa LLC ("EFR White Mesa") as to liability on all five of those claims.<sup>1</sup>

Four claims (numbered 1, 3, 4 and 5 in the complaint) seek relief for the company's 2012 and 2013 emissions-limit and radon-sampling violations. Proof of these claims is open and shut. All the facts needed to find Energy Fuels liable were self-reported by the company to the State of Utah and EPA in records Energy Fuels was required to submit to the government, typically under penalty of perjury. The Trust should be granted summary judgment on these claims.

The Trust's last claim (the second claim in the complaint) asserts that Energy Fuels has been violating the two-impoundment limit in the radon-emission standards. The company admits all the material facts about how it has used each of the Mill's impoundments. So the only issue to resolve is a legal one: Which of the Mill's six impoundments are subject to EPA's two-impoundment limit? The answer is all of them. The Court therefore should grant summary judgment on liability to the Trust on its second claim for relief.

The Trust requests oral argument on this motion.

---

<sup>1</sup> This lawsuit has been bifurcated into liability and penalty phases. Third Am. Sched. Order, ECF No. 54 at 2–3. This motion accordingly seeks summary judgment on liability only. And the Trust seeks summary judgment against only Energy Fuels Resources (USA) Inc. and EFR White Mesa LLC, which are subsidiaries of the other two defendants. Those two defendants—Energy Fuels Inc. and Energy Fuels Holdings Corp.—have agreed to guarantee any judgment against their subsidiaries. Order, ECF No. 49 (July 23, 2015).

## BACKGROUND

### I. The White Mesa Mill

The White Mesa Mill is an acid-leaching, uranium-processing mill that turns uranium ore and “alternate feed materials”<sup>2</sup> into a product called yellowcake, which is then enriched for use in nuclear reactors. Ex. 3 at 14:9–18; Ex. 4 at DEQ211.<sup>3</sup> The Mill sits about five miles north of the town of White Mesa, Utah a centuries-old Ute Mountain Ute tribal community, and roughly six miles south of downtown Blanding. Ex. 5 at GCT3394; Ex. 6 at EFR696; Ex. 7 at GCT11291 (Google Earth image of the Mill).

Energy Fuels<sup>4</sup> uses about 275 acres next to the Mill to get rid of its wastes. Ex. 8 at EFR649, 652; Ex. 3 at 15:10–14. Most of that area is known in the company’s jargon as the “tailings-management system,” which is split up into five “impoundments” named Cell 1, Cell 2, Cell 3, Cell 4A, and Cell 4B. Ex. 9 at 45:8–45:15. Until at least March 2014, Energy Fuels also let Mill waste build up for years at a time in a half-acre impoundment next to the Mill called Roberts Pond. Ex. 9 at 201:22–202:21; Ex. 10 at EFR21069; Ex. 11 at EFR4562; Ex. 12 at 16.

#### A. How the Mill Extracts Uranium and Produces Wastes

Regardless of what Energy Fuels feeds into the Mill, the company makes yellowcake using basically the same process. *See* Ex. 5 at GCT3419–20. It first mixes the material it wants to process with water, grinds it into a pulp, and then soaks the pulp in sulfuric acid and other chemicals to dissolve the uranium in it. Ex. 1 at 20:20–23:1. The resulting slurry is next

---

<sup>2</sup> Alternate feed materials are uranium-bearing substances other than uranium ore. Ex. 1 at 19:14–21. They come from contaminated industrial sites. Ex. 2 at EFR1509–13.

<sup>3</sup> The Mill also extracts vanadium from some materials it processes, making a product called “black flake.” Ex. 1 at 19:1–6.

<sup>4</sup> “Energy Fuels” when used in this brief means both Energy Fuels Resources (USA) Inc. and EFR White Mesa LLC unless otherwise stated.

“thickened” using eight big tanks. Ex. 1 at 23:5–17. In these tanks, a “clarified” uranium-bearing solution rises to the top of the tank and a semi-solid “underflow slurry” settles toward the bottom. Ex. 1 at 23:18–24:15; Ex. 5 at GCT3410–11. The underflow slurry is pumped to the next tank, where it becomes increasingly dense, while the “overflow solution” is pumped back to the previous tank to be further “clarified.” Ex. 1 at 23:18–24:15; Ex. 5 at GCT3410–11. Energy Fuels calls this process the counter-current-decantation circuit. Ex. 1 at 23:13–15.

The “underflow slurry” from the last thickening tank is pumped through pipes to the tailings-management system for disposal. Ex. 1 at 24:16–25:23. The uranium-bearing “overflow solution” from the last clarifying tank is sent on to a solvent-extraction circuit. Ex. 1 at 26:25–27:13. There, a chemical extractant pulls uranium out of the solution, separating it into a uranium-enriched solution and a uranium-depleted solution called raffinate. Ex. 1 at 27:14–30:5. The uranium-enriched solution is further concentrated in a “strip circuit” using acidified brine, and then ammonia is added to precipitate uranium out of the solution, creating yellowcake. Ex. 1 at 30:21–31:15, 29:4–12, 30:9–19, 33:8–16; Ex. 5 at GCT3411–12. If Energy Fuels is processing vanadium-bearing feed, the raffinate is sent to another set of circuits to recover vanadium. Ex. 1 at 33:17–23. Otherwise, the company disposes of the waste raffinate from the uranium solvent-extraction circuit in Cells 1, 4A, or 4B. Ex. 9 at 38:20–39:23; Ex. 1 at 32:2–33:7. Waste raffinate from the vanadium-extraction process is disposed of in Cell 1. Ex. 1 at 37:3–10, Ex. 9 at 47:17–24. For purposes of this lawsuit, Energy Fuels calls both these raffinate wastes “process solutions.” Ex. 13 at 5–6; Ex. 12 at 19–20; Ex. 9 at 24:16–25, 33:17–34:6.

## **B. The Mill’s Tailings Impoundments**

For the first few years that the Mill was running, Energy Fuels pumped the underflow

slurry from the counter-current-decantation circuit into Cell 2, and then sometime in the 1980s, started pumping it into Cell 3 too. Ex. 14 at EFR43535; Ex. 9 at 74:9–18. In this lawsuit, Energy Fuels calls only the solid, “sand-like” part of that slurry “tailings.” Ex. 15 at 7. Normally, Energy Fuels uses the word “tailings” to mean anything it gets rid of in the tailings-management system—sands and solutions alike. Ex. 9 at 44:24–45:18, 48:20–49:21 (calling Cell 1 a “tailings cell”), 72:18–73:2, 160:22–161:8, 210:9–213:15; Ex. 16 at 149:3–151:8, 160:15–161:7.

By the mid-to-late 1980s, Cell 2 was full, or nearly full, of tailings and the company stopped sending the tailings slurry to that cell. Ex. 9 at 83:11–18; Ex. 16 at 193:10–195:3; Ex. 14 at EFR43535. But the company did not close or reclaim the cell. Instead, it kept burying trash and contaminated wastes in Cell 2 until sometime in 2008. Ex. 9 at 83:19–84:14; Ex. 14 at EFR43542. Throughout that time, when the Mill was running, Energy Fuels kept pumping the tailings slurry into Cell 3. Ex. 14 at EFR43535. In October 2008, Energy Fuels began pumping the tailings slurry into Cell 4A, in addition to Cell 3. Ex. 12 at 23; Ex. 16 at 153:4–9. Two years later, in November 2010, Energy Fuels finished building Cell 4B, Ex. 17 at 6, and in January 2011, began moving solutions from Cell 4A into Cell 4B. Ex. 9 at 26:5–26:22; Ex. 13 at 5–6 (“Cell 4B received process solutions primarily pumped from cell 4A starting in January or February of 2011.”); Ex. 18 at DEQ52 (“[T]he actual date of initial startup of Cell 4B occurred on January 31, 2011....”).

Energy Fuels often calls Cell 4B and Cell 1 “evaporation ponds” because the company uses the cells to let waste solutions evaporate. Ex. 16 at 131:23–132:2, 134:7–12. After enough solutions evaporate, solids that are dissolved in the solutions precipitate out of the solution, and build up on the bottom of the cells, forming what are called “raffinate crystals.” Ex. 9 at 50:2–8;



Ex. 16 at 147:8–148:11, 160:15–161:18.

The cells in the tailings-management system are not the only impoundments into which Energy Fuels has put the Mill’s wastes. In the past, when solutions spilled out of the Mill’s process circuits or were removed from the process due to other problems, Energy Fuels often put them in Roberts Pond. Ex. 9 at 193:23–195:10. Over time, sediment also accumulated in the Pond. Ex. 9 at 200:12–201:1. Some of the process solutions soaked into that sediment, contaminating it with uranium. Ex. 9 at 204:21–206:15. Ore sands too may have been dumped out of the processing circuits into Roberts Pond. Ex. 9 at 201:2–9. By June 2011, Energy Fuels had “managed to get a significant amount of dirt / tailings in Roberts Pond,” as Energy Fuels’ Executive Vice President of Operations put it. Ex. 19 at EFR23930.

So, the following summer, the company cleaned out the contaminated muck on the bottom of the Pond for the first time in ten years. Ex. 10 at EFR21069 (“Roberts Pond had not ... undergone any cleanouts from its initial startup in 2002 until the July 2012 maintenance outage.”). For the next year and a half, Energy Fuels let waste build up in Roberts Pond until again cleaning it out in March 2014. Ex. 11 at EFR4562 (explaining that no maintenance activities involving the use of heavy equipment were performed between July 2012 and March 2014). After digging up the whole Pond in the ensuing months, Energy Fuels chose not to put it back into service. Ex. 9 at 193:23–194:7, 197:24–198:7; Ex. 12 at 16.

## **II. National Emission Standards for Hazardous Air Pollutants (NESHAPs)**

By adding Section 112 to the Clean Air Act in 1970, Congress directed EPA to publish a list of “hazardous air pollutants,” and then, for each pollutant, establish an “emission standard ... at the level which in [EPA’s] judgment provides an ample margin of safety to protect the public

health from such hazardous air pollutant.” Pub. L. 91-604 § 4(a), 84 Stat. 1685. Congress defined the term “hazardous air pollutant” to mean “an air pollutant . . . which in the judgment of the [EPA] may cause, or contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness.” *Id.*

In late 1979, EPA designated radionuclides as a hazardous air pollutant after finding that exposure to radionuclides increases the risk of getting cancer and suffering genetic damage. “[NESHAPs]; Addition of Radionuclides to List of Hazardous Air Pollutants,” 44 Fed. Reg. 76,738, 76,738 (Dec. 27, 1979). Seven years later, in 1986, EPA concluded that radon-222, a radioactive decay product of uranium that is released into the air from tailings impoundments at uranium mills, poses a significant enough health risk (particularly of lung cancer) to warrant establishing emission standards for those releases under Section 112 of the Act. “[NESHAPs]: Standards for Radon-222 Emissions from Licensed Uranium Mill Tailings,” 51 Fed. Reg. 34,056, 34,056–57 (Sep. 24, 1986). After years of litigation, EPA revised its radon-emission standards in December 1989. “[NESHAPs]: Radionuclides,” 54 Fed. Reg. 51,654 (Dec. 15, 1989).<sup>5</sup> Those standards remain in effect and are codified at 40 C.F.R. Part 61, Subpart W.

EPA adopted two standards for tailings impoundments in Subpart W. First, the agency established a numeric limit for radon-222 emitted from “existing impoundments” that were “licensed to accept additional tailings and . . . in existence as of December 15, 1989.” 40 C.F.R. §§ 61.252(a), 61.251(d). EPA set that limit to 20 picocuries per square meter per second—

---

<sup>5</sup> The presently codified version of Section 112, 42 U.S.C. § 7412, which mandates technology-based emission standards for hazardous air pollutants, was enacted in 1990, Pub. L. 101-549 § 301 (Nov. 15, 1990), and was thus not the authority for EPA’s 1989, health-based radon-emission standards (which were unaffected by the 1990 amendments, 42 U.S.C. § 7412(q)).

20 pCi/(m<sup>2</sup>-sec)—a measure of radioactivity.<sup>6</sup> *Id.* § 61.252(a). Second, the agency adopted “work-practice standards”—i.e., design and operating requirements—for new tailings impoundments built and licensed after December 15, 1989. *Id.* § 61.252(b). Those standards, in pertinent part, forbid operators from building tailings impoundments after December 15, 1989, unless those impoundments are “designed, constructed and operated” using “phased disposal” of tailings in no more than two 40-acre impoundments at any one time. *Id.* § 61.252(b)(1). Both new and “existing impoundments” count against this two-impoundment limit. *Id.*

### III. The Mill’s Operating Permits

Three main permits govern the Mill’s operations: an air-emissions approval order, a radioactive materials license, and a groundwater discharge permit. All three are issued by Utah state agencies under federal law, where authority has been delegated, and otherwise under state law. The Utah Division of Air Quality (“Air Quality Division”) administers the Mill’s approval order under the Utah Air Conservation Act, Utah Code Ann., Title 19, Ch. 2. *See* Ex. 20. The order requires Energy Fuels to comply with Subpart W. Ex. 20 at EFR691.

The Utah Division of Waste Management and Radiation Control (“Radiation Division”) issues and oversees Energy Fuels’ radioactive materials license for the Mill.<sup>7</sup> The license authorizes Energy Fuels to possess “radioactive material” in the form of natural uranium and prohibits the company from disposing of anything at the Mill other than “byproduct material” as that term is defined by 42 U.S.C. § 2014(e)(2). Ex. 2 at EFR1501, EFR1507 (§ 10.1.B.).

---

<sup>6</sup> A picocurie (pCi) is one trillionth of one curie (Ci), which is a unit for measuring the intensity of radioactivity of a material. *See* U.S. Nuclear Regulatory Commission, “Curie (Ci),” “Picocurie (pCi)” *available at* <http://www.nrc.gov/reading-rm/basic-ref/glossary.html>.

<sup>7</sup> The Divisions of Radiation Control and Solid and Hazardous Waste merged in 2015 into the Division of Waste Management and Radiation Control. *See* 2015 Utah Laws Ch. 451.

“Byproduct material” under section 2014(e)(2) has almost exactly the same definition as “tailings” under Subpart W: It means “the tailings or wastes produced by the extraction or concentration of uranium or thorium from any ore processed primarily for its source material content.” 42 U.S.C. § 2014(e)(2).

The Radiation Division also oversees the Mill’s groundwater discharge permit. Ex. 21. *See also* Utah Code Ann. §§ 19-5-107(3), 19-5-102(6). The discharge permit authorizes Energy Fuels to dispose of “tailings” in “existing Tailings Cells 1, 2, and 3....” Ex. 21 at EFR715 (“[T]ailings disposal in existing Tailings Cell 1, 2, and 3 is authorized by this Permit as defined in Table 3 and Part 1.D.1, above.”).

#### **IV. The Mill’s Reclamation Plan**

To get a radioactive materials license, Energy Fuels had to submit a plan explaining how the company would decommission and reclaim the Mill and its tailings impoundments. *See* 10 C.F.R. § 40.31(h) (requiring uranium-milling applications to include written specifications for the disposition of byproduct material to achieve the requirements and objectives of 10 C.F.R. Part 40, Appendix A); Utah Admin. Code R313-24-4 (incorporating 10 C.F.R. 40.31(h) by reference). Federal and State regulations require that plan, as well as the Mill’s radioactive materials license, to include a deadline for building a “final radon barrier” and “milestones” for retrieving windblown tailings and stabilizing the tailings pile (including dewatering it). *See* 10 C.F.R. Pt. 40, Appx. A, “Reclamation Plan”; Criterion 6A; Utah Admin. Code R313-24-4 (incorporating pertinent parts of Appendix A by reference). *See also* 10 C.F.R. Pt. 40, Appx. A, “Milestone means an action or event that is required to occur by an enforceable date.”

Despite these requirements, neither Energy Fuels’ radioactive materials license nor its

reclamation plan has deadlines for reclaiming the Mill's impoundments. *See* Ex. 2; Ex. 22 at EFR6398–424, EFR6457 (“Placement of cover materials will be based on a schedule determined by analysis of settlement data, piezometer data and equipment mobility considerations.”); Ex. 9 at 188:7–14. In fact, though the Radiation Division has “approved” Energy Fuels’ reclamation plan, the company and the Division have been revising the plan for years, including the design of the final radon barrier. Ex. 9 at 166:25–167:22, 128:2–129:23; Ex. 16 at 171:13–23.

#### **V. Energy Fuels’ Self-Reported Subpart W Violations in 2012 and 2013**

To ensure compliance with Subpart W’s numeric radon-emission limit, mill owners and operators are required to measure “radon flux” from “existing impoundments” using a protocol called Method 115. 40 C.F.R. § 61.253. Under Method 115, radon-flux measurements must be taken from three regions of each tailings pile: (1) water-saturated areas (beaches); (2) dry top-surface areas; and, (3) sides, if they are not built with dirt. 40 C.F.R. Pt. 61, Appx. B (“Method 115”) § 2.1.3 (“Radon flux measurements shall be made within each region on the pile, except for those areas covered with water.”); Method 115 § 2.1.2 (identifying the “[r]egions that shall be considered for operating mill tailings piles” when taking radon-flux measurements).

Mill owners and operators typically may choose to take one annual set of radon-flux measurements or take “more frequent measurements ... over a one year period.” Method 115 § 2.1.1. When measurements are made over a one-year period, they “may involve quarterly, monthly or weekly intervals,” Method 115 § 2.1.1, and, “prior to or after the first measurement period,” the owner or operator must submit to EPA “a schedule of the measurement frequency to be used.” 40 C.F.R. § 61.253. The radon-flux results “for each calendar year” must be reported to EPA and the State by March 31 of the next year. 40 C.F.R. § 61.254(a).

### A. 2012 Radon-Flux Measurements from Cells 2 and 3

On May 4, 2012, Energy Fuels sent its “[s]chedule for the 2012 NESHAPs [r]adon [f]lux [m]easurements” to the Utah Air Quality Division and EPA. Ex. 23 at EFR35271–72. Energy Fuels explained that it would “perform its 2012 NESHAPs Radon Flux measurements” for “Tailings Impoundments 2 and 3” from June 11–15, 2012. Ex. 23 at EFR35272. The company took these measurements as planned. Ex. 24 at EFR35276. And when the results came back ten days later, they showed that Cell 2’s radon flux exceeded Subpart W’s 20 pCi/(m<sup>2</sup>-sec) emission limit. *Id.* The average for the whole pile was 23.1 pCi/(m<sup>2</sup>-sec). *Id.*

So Energy Fuels decided to take more measurements. The company has not said exactly why it made that decision, but one obvious outcome of taking more measurements could be to lower the average for the year below Subpart W’s numeric limit. Ex. 16 at 49:24–53:7. On August 3, 2012, Energy Fuels sent the Division and EPA a second measurement schedule for Cell 2, Ex. 25 at EFR35273–75, (but not Cell 3, whose radon flux came in under 20 pCi/(m<sup>2</sup>-sec) in June), Ex. 26 at GCT8875. This new schedule said that Energy Fuels would take a second set of radon-flux measurements from Cell 2 in September and a third set in late November or early December. Ex. 25 at EFR35274. The September results came back yet higher than June: 26.6 pCi/(m<sup>2</sup>-sec). Ex. 27 at EFR31861. The company then bumped up its third set of measurements to October. Ex. 28 at EFR35269–70. But the radon flux came back higher still, edging up to 27.7 pCi/(m<sup>2</sup>-sec). Ex. 26 at GCT8972. So, the company took a fourth set of measurements in November. Ex. 26 at GCT8992. That round of sampling came back at 26.1 pCi/(m<sup>2</sup>-sec) for the whole cell, Ex. 26 at GCT9002, bringing the average for the year to 25.9 pCi/(m<sup>2</sup>-sec), *id.* at GCT8875.

Energy Fuels sent its 2012 Subpart W report to the Air Quality Division on March 29, 2013. Ex. 26 at GCT8875. The company reported that the “measured radon flux from Cell 2 in 2012 ... exceeded the standard set out in 40 CFR 61.252 of  $20 \text{ pCi m}^{-2} \text{ s}^{-1}$ ,” and it proposed “actions and a timeframe to bring Cell 2 into compliance with the standard set out in 40 CFR 61.252.” Ex. 26 at GCT8875. Because the Mill was out of compliance with Subpart W, both the company and Division concluded that Energy Fuels had to start monitoring and reporting radon flux from Cell 2 monthly. Ex. 26 at GCT8872, GCT8883. *See also* 40 C.F.R. § 61.254(b).

#### **B. 2013 Radon-Flux Measurements from Cells 2 and 3**

Energy Fuels failed to get back into compliance with Subpart W in 2013. Instead, the company reported that Cell 2’s radon flux for the year was  $20.4 \text{ pCi}/(\text{m}^2\text{-sec})$ . Ex. 29 at GCT8228 (“The result of the 2013 radon-222 flux monitoring for Cell 2 was  $20.4 \text{ pCi}/(\text{m}^2\text{-sec})$  ... which exceeds the  $20 \text{ pCi}/(\text{m}^2\text{-sec})$  set out in 40 CFR 61.252(a) for the year.”). For Cell 3, Energy Fuels reported an annual radon flux just under the Subpart W limit:  $19.4 \text{ pCi}/(\text{m}^2\text{-sec})$ . Ex. 30 at GCT8280. But the company got that result using measurement methods it had not used before and has not used since. Ex. 16 at 95:12–99:3; 118:22–119:6.

Much like Energy Fuels did for Cell 2 in 2012, the company told the Air Quality Division in April 2013 that it would perform its “[a]nnual sampling event” for Cell 3 between June 10–13, 2013. Ex. 31 at EFR35264. But when the results of the June sampling came back, the average radon flux for Cell 3 was  $22.7 \text{ pCi}/(\text{m}^2\text{-sec})$ . Ex. 32 at EFR24924. So once again, Energy Fuels responded by taking samples that had not been scheduled in its initial notice to the Division and EPA. The company sent another sampling schedule to the Division and EPA on July 18, 2013. Ex. 33 at EFR992–93. This time, Energy Fuels added two more sampling events to the 2013

schedule, one in September, and another in “Late November/Early December.” Ex. 33 at EFR992. The company sent a third schedule to the Division and EPA on September 5, 2013, setting a date of December 2–4 for the third sampling event. Ex. 34 at EFR1067.

What Energy Fuels did not say in its July or September schedules is that it would be sampling only Cell 3’s cover region and not its beach. Ex. 30 at GCT8318, GCT8351. The company then combined the June beach measurement with the September and December cover measurements to come up with an annual average of 19.4 pCi/(m<sup>2</sup>-sec). Ex. 30 at GCT8280, GCT8318, GCT8320, GCT8351, GCT8353. Had Energy Fuels relied only on the complete June measurements—the only sampling event where radon flux from both regions was measured—it would have reported an annual radon flux for Cell 3 of 22.7 pCi/(m<sup>2</sup>-sec). Ex. 30 at GCT8293.

## **VI. The Trust’s Citizen Suit Under the Clean Air Act**

Neither EPA nor the State of Utah took enforcement action against Energy Fuels for violating Subpart W. Defs.’ Answers ¶ 32 (Oct. 31, 2014), ECF Nos. 33, 34. So, on January 29, 2014, the Trust notified Energy Fuels, EPA, and the State that the Trust intended to sue the company under the Clean Air Act’s “citizen-suit” provision. Ex. 35 at GCT1282–89.

On April 2, 2014, the Trust filed its complaint, alleging that Energy Fuels had violated Subpart W by: (1) failing to keep the 2012 and 2013 average annual radon-222 emissions from Cell 2 below 20 pCi/(m<sup>2</sup>-sec), contrary to the radon-222 emission limit (40 C.F.R. § 61.252(a)); and (2) operating more than two impoundments, contrary to the phased-disposal work-practice standard (40 C.F.R. § 61.252(b)(1)). Pl.’s Compl. ¶¶ 31–42, ECF No. 2.

Days before the Trust filed the complaint, Energy Fuels sent its annual Subpart W report to the Air Quality Division, describing how Energy Fuels sampled for and calculated Cell 3’s



radon flux in 2013. Ex. 30 at GCT8280, GCT8318, GCT8351. After concluding that Energy Fuels in sampling Cell 3 in 2013 had violated Subpart W's sampling-schedule requirements (40 C.F.R. § 61.253), sampling-methodology requirements (40 C.F.R. § 61.253 and Method 115), and thus, Subpart W's radon-222 emission limit (40 C.F.R. § 61.252(a)), the Trust notified Energy Fuels on July 29, 2014, that the Trust intended to amend its complaint to assert additional claims. Ex. 36 at EFR47121–32. The Court granted leave to amend on October 15, 2014, Order, ECF No. 28, and the Trust filed its amended complaint later that day. Pl.'s First Am. Compl., ECF No. 29.

## STATEMENT OF ELEMENTS AND UNDISPUTED MATERIAL FACTS

### I. All Claims for Relief: Violation of Emission Standard or Limitation (42 U.S.C. § 7604 and Subpart W)

#### *Legal Authority*

“[A]ny person may commence a civil action on his own behalf against any person ... who is alleged to have violated (if there is evidence that the alleged violation has been repeated) or to be in violation of ... an emission standard or limitation under [Chapter 85 of Title 42].”<sup>8</sup> “Emission standard or limitation under [Chapter 85 of Title 42]’ means—(1) [an] “emission limitation, standard of performance or emission standard, [or] (3) ... any requirement under section ...7412 of [Title 42, i.e., Section 112 of the Clean Air Act] (without regard to whether such requirement is expressed as an emission standard or otherwise).”<sup>9</sup>

“**Subpart W—National Emission Standards for Radon Emissions From Operating Mill Tailings. § 61.250 Designation of facilities.** The provisions of this subpart apply to owners or operators of facilities licensed to manage uranium byproduct materials during and following the processing of uranium ores, commonly referred to as uranium mills and their associated tailings.”<sup>10</sup>

#### *Material Facts*

1. EFR White Mesa owns the Mill.<sup>11</sup>
2. EFR USA operates the Mill.<sup>12</sup>
3. The Mill has been licensed since at least 2007 to manage uranium byproduct material during and following the processing of uranium ores.<sup>13</sup>

---

<sup>8</sup> 42 U.S.C. § 7604(a)(1).

<sup>9</sup> 42 U.S.C. § 7604(f).

<sup>10</sup> 40 C.F.R. § 61.250.

<sup>11</sup> First Am. Compl. ¶ 9 (Oct. 15, 2014), ECF No. 29 (alleging that EFR White Mesa owns the Mill); EFR USA’s Answer ¶ 9 (Oct. 31, 2014), ECF No. 34 (admitting that EFR White Mesa is the owner of the Mill); EFR White Mesa’s Answer ¶ 9 (Oct. 31, 2014), ECF No. 33 (same).

<sup>12</sup> First Am. Compl. ¶ 9, ECF No. 29 (alleging that EFR USA operates the Mill); EFR USA’s Answer First Am. Compl. ¶ 9, ECF No. 34 (admitting that EFR USA is the operator of the Mill); EFR White Mesa’s Answer First Am. Compl. ¶ 9, ECF No. 33 (same).

<sup>13</sup> Ex. 37 at EFR613 (authorizing the transfer, receipt, possession, and use of natural uranium), EFR613 (“The authorized place of use shall be the licensee’s White Mesa uranium milling facility....); EFR617 (“The licensee is hereby authorized to possess byproduct material in the form of uranium waste tailings and other uranium byproduct waste generated by the licensee’s milling operations authorized by this license.”); Ex. 2 EFR1501, 1505 (same).

## II. All Claims for Relief: 60-Day Notice (42 U.S.C. § 7604(b))

### *Legal Authority*

“No action may be commenced ... under [42 U.S.C. § 7604(a)(1)] prior to 60 days after the plaintiff has given notice of the violation (i) to the Administrator [of the EPA], (ii) to the State in which the violation occurs, and (iii) to any alleged violator of the standard, limitation, or order ....”<sup>14</sup>

### *Material Facts*

1. On January 29, 2014, the Trust notified Energy Fuels, EPA, and the State of Utah that the Trust intended to sue Energy Fuels under the Clean Air Act’s citizen-suit provision for violating Subpart W: (1) by letting average annual radon-222 emissions from Cell 2 exceed 20 pCi/(m<sup>2</sup>-sec) in 2012 and 2013; and (2) by operating more than two impoundments.<sup>15</sup>

2. The Trust filed its initial complaint 63 days later, on April 2, 2014.<sup>16</sup>

3. On July 29, 2014, the Trust notified Energy Fuels, EPA, and the State of Utah that the Trust intended to amend its complaint to assert that Energy Fuels, in sampling Cell 3 in 2013, had violated Subpart W’s sampling-schedule requirements (40 C.F.R. § 61.253), sampling-methodology requirements (40 C.F.R. § 61.253 and Method 115), and Subpart W’s radon-222 emission limit (40 C.F.R. § 61.252).<sup>17</sup>

4. The Trust filed its amended complaint on October 15, 2014.<sup>18</sup>

## III. All Claims for Relief: Standing

### *Legal Authority*

“An association has standing to bring suit on behalf of its members when its members would otherwise have standing to sue in their own right, the interests at stake are germane to the organization’s purpose, and neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit.”<sup>19</sup> “[T]o satisfy Article III’s standing requirements, a plaintiff must show (1) it has suffered an ‘injury in fact’ that is (a) concrete and particularized and (b) actual or imminent, not conjectural or hypothetical; (2) the injury is fairly

---

<sup>14</sup> 42 U.S.C. § 7604(b)(1)(A).

<sup>15</sup> Ex. 35 at GCT1282–89.

<sup>16</sup> Pl.’s Compl., ECF No. 2.

<sup>17</sup> Ex. 36 at EFR47121–32.

<sup>18</sup> Pl.’s First Am. Compl., ECF No. 29.

<sup>19</sup> *Friends of the Earth, Inc. v. Laidlaw Envtl. Servs. (TOC), Inc.*, 528 U.S. 167, 181 (2000).

traceable to the challenged action of the defendant; and (3) it is likely, as opposed to merely speculative, that the injury will be redressed by a favorable decision.”<sup>20</sup>

### *Material Facts*

1. The Grand Canyon Trust’s mission is to protect and restore the landscapes, air, wildlife, and beauty of the Colorado Plateau, including the environment and the health of those who live near and use areas that the uranium industry pollutes.<sup>21</sup>

2. Members of the Trust have suffered an injury in fact because they live within a few miles of the Mill, use the land adjacent to the Mill for recreation, breathe the air downwind of the Mill, gather plants around the Mill, and use the area around the Mill for other activities, and the Mill’s operations and radon emissions detract from these interests.<sup>22</sup>

## **IV. First Claim for Relief: Violation of Radon-222 Emission Limit from Cell 2 in 2012 and 2013**

The Trust’s first claim for relief asserts that Energy Fuels violated the Clean Air Act—*viz.*, the radon-222 emission standard in 40 C.F.R. § 61.252(a)—in 2012 and 2013 by failing to keep radon-222 emissions from Cell 2 below 20 pCi/(m<sup>2</sup>-sec).

### **A. Element 1: Existing uranium mill tailings pile (40 C.F.R. § 61.251(d))**

#### *Legal Authority*

“Radon-222 emissions to the ambient air from an existing uranium mill tailings pile shall not exceed 20 pCi/(m<sup>2</sup>-sec) (1.9 pCi/(ft<sup>2</sup>-sec)) of radon-222.”<sup>23</sup> “*Existing impoundment* means any uranium mill tailings impoundment which is licensed to accept additional tailings and is in existence as of December 15, 1989.”<sup>24</sup>

#### *Material Facts*

1. Cell 2 was in existence as of December 15, 1989.<sup>25</sup>

<sup>20</sup> *Laidlaw*, 528 U.S. at 180–81.

<sup>21</sup> Ex. 38 ¶¶ 2–7.

<sup>22</sup> Ex. 39 ¶¶ 1–12; Ex. 40 ¶ 1–6; Ex. 41 ¶¶ 1–9; Ex. 42 ¶ 1, 3–9.

<sup>23</sup> 40 C.F.R. § 61.252(a).

<sup>24</sup> 40 C.F.R. § 61.251(d).

<sup>25</sup> First Am. Compl. ¶ 33 (Oct. 15, 2014), ECF No. 29 (alleging that “[c]onstruction of Cell 2 was completed in May 1980”); Energy Fuels’ Answer First Am. Compl. ¶ 33 (Oct. 31, 2014), ECF No. 34 (admitting the allegation that construction of Cell 2 was completed in May 1980); EFR White Mesa’s Answer First Am. Compl. ¶ 33 (Oct. 31, 2014), ECF No. 33 (same).

2. Cell 2 was licensed to accept additional tailings as of December 15, 1989.<sup>26</sup>

**B. Element 2: Radon-222 emissions over 20 pCi/(m<sup>2</sup>-sec) (40 C.F.R. § 61.252(a))**

*Legal Authority*

“Radon-222 emissions to the ambient air from an existing uranium mill tailings pile shall not exceed 20 pCi/(m<sup>2</sup>-sec) (1.9 pCi/(ft<sup>2</sup>-sec)) of radon-222.”<sup>27</sup>

*Material Facts*

1. Average annual radon-222 emissions from Cell 2 in 2012, as reported by Energy Fuels to the Air Quality Division, were 25.9 pCi/(m<sup>2</sup>-sec).<sup>28</sup>

2. Average annual radon-222 emissions from Cell 2 in 2013, as reported by Energy Fuels to the Air Quality Division, were 20.4 pCi/(m<sup>2</sup>-sec).<sup>29</sup>

**V. Fifth Claim for Relief: Violation of Radon-222 Emission Limit from Cell 3 in 2013**

The Trust’s fifth claim for relief asserts that Energy Fuels violated the Clean Air Act—*viz.*, the radon-222 emission standard in 40 C.F.R. § 61.252(a)—in 2013 by failing to keep radon-222 emissions from Cell 3 below 20 pCi/(m<sup>2</sup>-sec).

**A. Element 1: Existing uranium mill tailings pile (40 C.F.R. § 61.251(d))**

*Legal Authority*

“Radon-222 emissions to the ambient air from an existing uranium mill tailings pile shall not exceed 20 pCi/(m<sup>2</sup>-sec) (1.9 pCi/(ft<sup>2</sup>-sec)) of radon-222.”<sup>30</sup> “Existing impoundment means

---

<sup>26</sup> Ex. 14 at EFR43529. *See also* Ex. 26 at GCT8876 (stating in 2012 Subpart W report, under penalty of perjury, that Cell 2 was an “‘existing impoundment’ as defined in 40 CFR 61.251”); Ex. 29 at GCT8232 (stating in 2013 Subpart W report, under penalty of perjury, that Cell 2 was an “‘existing impoundment’ as defined in 40 CFR 61.251”); Ex. 16 at 62:15–63:3 (confirming in corporate deposition that Cell 2 is an “existing impoundment”).

<sup>27</sup> 40 C.F.R. § 61.252(a).

<sup>28</sup> Ex. 26 at GCT8875 (“The result of the 2012 radon-222 flux monitoring for Cell 2 was 25.9 pCi m<sup>-2</sup> s<sup>-1</sup> (averaged over four monitoring events)...”).

<sup>29</sup> Ex. 29 at GCT8228 (“The result of the 2013 radon-222 flux monitoring for Cell 2 was 20.4 pCi/(m<sup>2</sup> -sec) (averaged over 9 monthly sampling events), which exceeds the 20 pCi/(m<sup>2</sup>-sec) set out in 40 CFR 61.252(a) for the year.”).

<sup>30</sup> 40 C.F.R. § 61.252(a).

any uranium mill tailings impoundment which is licensed to accept additional tailings and is in existence as of December 15, 1989.”<sup>31</sup>

*Material Facts*

1. Cell 3 was in existence as of December 15, 1989.<sup>32</sup>
2. Cell 3 was licensed to accept additional tailings as of December 15, 1989.<sup>33</sup>

**B. Element 2: Radon-222 emissions over 20 pCi/(m<sup>2</sup>-sec) (40 C.F.R. § 61.252(a))**

*Legal Authority*

“Radon-222 emissions to the ambient air from an existing uranium mill tailings pile shall not exceed 20 pCi/(m<sup>2</sup>-sec) (1.9 pCi/(ft<sup>2</sup>-sec)) of radon-222.”<sup>34</sup>

*Material Facts*

1. Energy Fuels took radon-flux samples from Cell 3’s beach region and cover region between June 10–11, 2013, to be used in calculating the 2013 average annual radon flux for Cell 3 under Subpart W.<sup>35</sup>
2. During 2013, only for the June sampling event did Energy Fuels calculate the weighted average radon flux using beach and cover radon-flux measurements taken during the same sampling event.<sup>36</sup>
3. Radon-222 emissions from Cell 3 reported by Energy Fuels to the Air Quality Division for June 2013 were 22.7 pCi/(m<sup>2</sup>-sec).<sup>37</sup>

---

<sup>31</sup> 40 C.F.R. § 61.251(d).

<sup>32</sup> First Am. Compl. ¶ 33 (Oct. 15, 2014), ECF No. 29 (alleging that “[c]onstruction of Cell 3 was completed in September 1982”); Energy Fuels’ Answer First Am. Compl. ¶ 33 (Oct. 31, 2014), ECF No. 34 (admitting the allegation that construction of Cell 3 was completed in September 1982); EFR White Mesa’s Answer First Am. Compl. ¶ 33 (Oct. 31, 2014), ECF No. 33 (admitting the allegation that construction of Cell 3 was completed in September 1982).

<sup>33</sup> Ex. 17 at 13–14 (“Energy Fuels Resources admits Cell 3 was an existing impoundment as of December 15, 1989 and remains to this day licensed to accept additional tailings.”); Ex. 43 at 10 (same); Ex. 29 at GCT8232 (stating under penalty of perjury in its 2013 Subpart W report that Cell 3 was an “existing impoundment’ as defined in 40 CFR 61.251”).

<sup>34</sup> 40 C.F.R. § 61.252(a).

<sup>35</sup> Ex. 30 at GCT8288.

<sup>36</sup> Ex. 30 at GCT8293, GCT8325, GCT8358.

<sup>37</sup> Ex. 30 at GCT8293.

## VI. Third Claim for Relief: Violation of Sampling-Schedule Requirements

The Trust's third claim for relief asserts that Energy Fuels violated the Clean Air Act—*viz.*, the sampling-schedule requirements in 40 C.F.R. § 61.253—in 2013 by revising its previously submitted radon-flux sampling schedule after the first measurement period.

### A. Element 1: Existing uranium mill tailings pile (40 C.F.R. § 61.251(d))

#### *Legal Authority*

“Radon-222 emissions to the ambient air from an existing uranium mill tailings pile shall not exceed 20 pCi/(m<sup>2</sup>-sec) (1.9 pCi/(ft<sup>2</sup>-sec)) of radon-222.”<sup>38</sup> “*Existing impoundment* means any uranium mill tailings impoundment which is licensed to accept additional tailings and is in existence as of December 15, 1989.”<sup>39</sup>

#### *Material Facts*

1. Cell 3 was in existence as of December 15, 1989.<sup>40</sup>
2. Cell 3 was licensed to accept additional tailings as of December 15, 1989.<sup>41</sup>

### B. Element 2: Revision of a previously submitted radon-flux sampling schedule after the first measurement period (40 C.F.R. § 61.253)

#### *Legal Authority*

“Compliance with the emission standard in this subpart shall be determined annually through the use of Method 115 of appendix B. When measurements are to be made over a one year period, EPA shall be provided with a schedule of the measurement frequency to be used. The schedule may be submitted to EPA prior to or after the first measurement period.”<sup>42</sup>

---

<sup>38</sup> 40 C.F.R. § 61.252(a).

<sup>39</sup> 40 C.F.R. § 61.251(d).

<sup>40</sup> First Am. Compl. ¶ 33 (Oct. 15, 2014), ECF No. 29 (alleging that “[c]onstruction of Cell 3 was completed in September 1982”); Energy Fuels’ Answer First Am. Compl. ¶ 33 (Oct. 31, 2014), ECF No. 34 (admitting the allegation that construction of Cell 3 was completed in September 1982); EFR White Mesa’s Answer First Am. Compl. ¶ 33 (Oct. 31, 2014), ECF No. 33 (admitting the allegation that construction of Cell 3 was completed in September 1982).

<sup>41</sup> Ex. 17 at 13–14 (“Energy Fuels Resources admits Cell 3 was an existing impoundment as of December 15, 1989 and remains to this day licensed to accept additional tailings.”); Ex. 43 at 10 (same); Ex. 29 at GCT8232 (stating under penalty of perjury in its 2013 Subpart W report that Cell 3 was an “existing impoundment” as defined in 40 CFR 61.251”).

<sup>42</sup> 40 C.F.R. § 61.253.

### *Material Facts*

1. Energy Fuels submitted to the Air Quality Division and EPA a measurement notice for Cell 3 radon-flux measurements for 2013 on April 11, 2013, before taking any radon-flux measurements from Cell 3 under Subpart W. The notice told EPA that Energy Fuels would perform an “[a]nnual sampling event” between June 10 and June 13, 2013.<sup>43</sup>

2. Energy Fuels took radon-flux samples from Cell 3 between June 10–11, 2013, to be used in calculating the 2013 average annual radon flux for Cell 3 under Subpart W.<sup>44</sup>

3. On July 18, 2013, Energy Fuels submitted a measurement schedule to the Air Quality Division and EPA stating that Energy Fuels would take additional radon-flux samples from Cell 3 between September 21–23 and in “Late November/Early December.”<sup>45</sup>

4. Energy Fuels took radon-flux samples from Cell 3 between September 22–23, 2013, to be used in calculating the 2013 average annual radon flux for Cell 3 under Subpart W.<sup>46</sup>

5. Energy Fuels took radon-flux samples from Cell 3 between December 3–4, 2013, to be used in calculating the 2013 average annual radon flux for Cell 3 under Subpart W.<sup>47</sup>

## **VII. Fourth Claim for Relief: Violation of Method 115’s Measurement Protocols**

The Trust’s fourth claim for relief asserts that in 2013 Energy Fuels violated the Clean Air Act—*viz.*, the sampling-methodology requirements in 40 C.F.R. § 61.253 and Method 115—by failing to take radon-flux measurements from both Cell 3’s cover region and beach region during all measurement events and thus calculating the average annual radon flux by combining the June 2013 beach results with the September and December 2013 cover results.

### **A. Element 1: Existing uranium mill tailings pile (40 C.F.R. § 61.251(d))**

#### *Legal Authority*

“Radon-222 emissions to the ambient air from an existing uranium mill tailings pile shall not exceed 20 pCi/(m<sup>2</sup>-sec) (1.9 pCi/(ft<sup>2</sup>-sec)) of radon-222.”<sup>48</sup> “*Existing impoundment* means

---

<sup>43</sup> Ex. 31 at EFR35264.

<sup>44</sup> Ex. 30 at GCT8288 (“On June 10, 2013, one hundred sampling locations were spread out throughout the Cell 3 Beaches region; and on June 11, 2013, one hundred sampling locations were spread out throughout the Cell 3 Covered region.”).

<sup>45</sup> Ex. 33 at EFR992. On September 5, 2013, Energy Fuels sent a third schedule to the Division and EPA, setting a date of December 2–4 for the third sampling event. Ex. 34 at EFR1067.

<sup>46</sup> Ex. 30 at GCT8318.

<sup>47</sup> Ex. 30 at GCT8351.

<sup>48</sup> 40 C.F.R. § 61.252(a).



any uranium mill tailings impoundment which is licensed to accept additional tailings and is in existence as of December 15, 1989.”<sup>49</sup>

*Material Facts*

1. Cell 3 was in existence as of December 15, 1989.<sup>50</sup>
2. Cell 3 was licensed to accept additional tailings as of December 15, 1989.<sup>51</sup>

**B. Element 2: Failure to take radon-flux measurements from each region on the pile during each sampling event (Method 115 § 2.1.3)**

*Legal Authority*

“Compliance with the emission standard in [40 C.F.R. Subpart W] shall be determined annually through the use of Method 115 of appendix B.”<sup>52</sup> “The distribution and number of radon flux measurements required on a pile will depend on clearly defined areas of the pile (called regions) that can have significantly different radon fluxes due to surface conditions. The mean radon flux shall be determined for each individual region of the pile. Regions that shall be considered for operating mill tailings piles are: (a) Water covered areas, (b) Water saturated areas (beaches), (c) Dry top surface areas, and (d) Sides, except where earthen material is used in dam construction.”<sup>53</sup> “Radon flux measurements shall be made within each region on the pile, except for those areas covered with water.”<sup>54</sup>

*Material Facts*

1. Energy Fuels took radon-flux samples from Cell 3’s cover region between September 22–23, 2013, to be used in calculating the 2013 average annual radon flux for Cell 3

---

<sup>49</sup> 40 C.F.R. § 61.251(d).

<sup>50</sup> First Am. Compl. ¶ 33 (Oct. 15, 2014), ECF No. 29 (alleging that “[c]onstruction of Cell 3 was completed in September 1982”); Energy Fuels’ Answer First Am. Compl. ¶ 33 (Oct. 31, 2014), ECF No. 34 (admitting the allegation that construction of Cell 3 was completed in September 1982); EFR White Mesa’s Answer First Am. Compl. ¶ 33 (Oct. 31, 2014), ECF No. 33 (admitting the allegation that construction of Cell 3 was completed in September 1982).

<sup>51</sup> Ex. 17 at 13–14 (“Energy Fuels Resources admits Cell 3 was an existing impoundment as of December 15, 1989 and remains to this day licensed to accept additional tailings.”); Ex. 43 at 10 (same); Ex. 29 at GCT8232 (stating under penalty of perjury in its 2013 Subpart W report that Cell 3 was an “existing impoundment’ as defined in 40 CFR 61.251”).

<sup>52</sup> 40 C.F.R. § 61.253.

<sup>53</sup> Method 115 § 2.1.2.

<sup>54</sup> Method 115 § 2.1.3.

under Subpart W.<sup>55</sup> Energy Fuels did not sample Cell 3’s beach region during the September 22–23, 2013, radon-flux sampling event.<sup>56</sup>

2. Energy Fuels took radon-flux samples from Cell 3’s cover region between December 3–4, 2013, to be used in calculating the 2013 average annual radon flux for Cell 3 under Subpart W.<sup>57</sup> Energy Fuels did not sample Cell 3’s beach region during the December 3–4, 2013, radon-flux sampling event.<sup>58</sup>

### **VIII. Second Claim for Relief: Violation of Subpart W by Operating More than Two Impoundments**

The Trust’s second claim for relief asserts that Energy Fuels has violated and continues to violate the Clean Air Act—*viz.*, the two-impoundment limit in 40 C.F.R. 61.252(b)(1)—by operating more than two impoundments at the Mill every day since at least November 11, 2010.

#### **A. Element 1: Construction of an impoundment after December 15, 1989 (40 C.F.R. § 61.252(b)).**

##### *Legal Authority*

“After December 15, 1989, no new tailings impoundment can be built unless it is designed, constructed and operated to meet one of the two following work practices: (1) Phased disposal in lined tailings impoundments that are no more than 40 acres in area and meet the requirements of 40 CFR 192.32(a) as determined by the Nuclear Regulatory Commission.”<sup>59</sup>

##### *Material Facts*

1. Energy Fuels finished building Cell 4B on November 11, 2010.<sup>60</sup>

#### **B. Element 2: Use of phased disposal (40 C.F.R. §§ 61.252(b), 61.252(f))**

##### *Legal Authority*

“After December 15, 1989, no new tailings impoundment can be built unless it is designed, constructed and operated to meet one of the two following work practices: (1) Phased

---

<sup>55</sup> Ex. 30 at GCT8318, GCT8320.

<sup>56</sup> Ex. 30 at GCT8320.

<sup>57</sup> Ex. 30 at GCT8351, GCT8353.

<sup>58</sup> Ex. 30 at GCT8353.

<sup>59</sup> 40 C.F.R. § 61.252(b).

<sup>60</sup> Ex. 17 at 6 (“Construction of Cell 4B was completed on November 11, 2010.”).

disposal in lined tailings impoundments that are no more than 40 acres in area and meet the requirements of 40 CFR 192.32(a) as determined by the Nuclear Regulatory Commission.”<sup>61</sup>

“*Phased disposal* means a method of tailings management and disposal which uses lined impoundments which are filled and then immediately dried and covered to meet all applicable Federal standards.”<sup>62</sup>

*Material Facts*

1. Energy Fuels uses phased disposal at the Mill.<sup>63</sup>

**C. Element 3: Operation of more than two impoundments (40 C.F.R. §§ 61.252(b)(1), 61.251(e), 61.251(g)).**

*Legal Authority*

“The owner or operator shall have no more than two impoundments, including existing impoundments, in operation at any one time.”<sup>64</sup>

“*Operation* means that an impoundment is being used for the continued placement of new tailings or is in standby status for such placement. An impoundment is in operation from the day that tailings are first placed in the impoundment until the day that final closure begins.”<sup>65</sup>

“*Uranium byproduct material or tailings* means the waste produced by the extraction or concentration of uranium from any ore processed primarily for its source material content.”<sup>66</sup>

---

<sup>61</sup> 40 C.F.R. § 61.252(b).

<sup>62</sup> 40 C.F.R. § 61.251(f).

<sup>63</sup> EFR USA’s Answer First Am. Compl. ¶ 33 (Oct. 31, 2014), ECF No. 34 (“Energy Fuels ... avers that it does employ phased disposal in compliance with Subpart W.”); EFR White Mesa’s Answer First Am. Compl. ¶ 33 (Oct. 31, 2014), ECF No. 33 (“EFR White Mesa ... avers that the White Mesa Mill employs phased disposal in compliance with Subpart W.”).

<sup>64</sup> 40 C.F.R. § 61.252(b)(1).

<sup>65</sup> 40 C.F.R. § 61.251(e).

<sup>66</sup> 40 C.F.R. § 61.251(g).

*Material Facts*

The Trust can prevail on its second claim for relief on at least five, independent factual bases. The material facts for each of these outcomes are set out below. If the Court rules for the Trust on Alternative A, it is not necessary to rule on Alternative A1. Likewise, if the Court rules for the Trust on Alternative C, it is not necessary to rule on Alternative C1. Because it may affect the relief to be ordered, however, it is necessary to determine whether to grant summary judgment on at least one version of Alternative A, Alternative B, and Alternative C.

*Alternative A*

1. Cell 3 has been in operation since at least November 11, 2010.<sup>67</sup>
2. Cell 4A has been in operation since at least November 11, 2010.<sup>68</sup>
3. Cell 1 has been used for the continued placement of process solutions since at least November 11, 2010.<sup>69</sup>
4. Cell 4B has been used for the continued placement of process solutions since January 31, 2011.<sup>70</sup>
5. Process solutions are waste produced by the extraction or concentration of uranium from any ore processed primarily for its source material content.<sup>71</sup>

---

<sup>67</sup> Ex. 12 at 26 (“Energy Fuels Resources admits that Cell 3 is a tailings impoundment as defined by Subpart W in operation since February 1, 2009.”); Ex. 44 at 16 (same).

<sup>68</sup> Ex. 12 at 26 (“Energy Fuels Resources admits that Cell 4A is a tailings impoundment as defined by Subpart W in operation since February 1, 2009.”); Ex. 44 at 16 (same).

<sup>69</sup> Ex. 17 at 14 (“Energy Fuels admits Cell 1 has from time to time received process solutions since February 1, 2009.”); Ex. 43 at 10 (same); Ex. 14 at EFR43535.

<sup>70</sup> Ex. 13 at 5–6 (“Cell 4B received process solutions primarily pumped from Cell 4A starting in January or February of 2011.”); Ex. 18 at DEQ52 (“Please take notice pursuant to 40 CFR 61.09(a)(2) that the actual date of initial startup of Cell 4B occurred on January 31, 2011...”); 40 C.F.R. § 61.02 (“Startup means the setting in operation of a stationary source for any purpose.”).

<sup>71</sup> Ex. 12 at 19–20 (“Process solutions that are discharged to the mill’s tailings impoundments or evaporation ponds are solutions that emanate from the extraction or concentration of uranium at the mill from any ore (including conventional ores and alternate feed materials) processed primarily for its uranium content and that are not tailings, as defined in Energy Fuels Answer to Interrogatory No. 14.”); Ex. 44 at 12 (same); Ex. 12 at 21 (“All impounded substances, other than 11e.(2) byproduct material received from third-party [in-situ recovery] facilities for direct disposal, are tailings or wastes produced by the extraction or concentration of uranium at the mill from any ore (including conventional ores and alternate feed materials) processed primarily for

*Alternative A1*

1. Cell 3 has been in operation since at least November 11, 2010.<sup>72</sup>
2. Cell 4A has been in operation since at least November 11, 2010.<sup>73</sup>
3. Cell 1 has been used for the continued placement of process solutions since at least November 11, 2010.<sup>74</sup>
4. Cell 4B has been used for the continued placement of process solutions since January 31, 2011.<sup>75</sup>
5. Sand-like wastes that result from the processing of uranium ore eventually precipitate out of process solutions in Cells 1 and 4B.<sup>76</sup>

*Alternative B*

1. Cell 3 has been in operation since at least November 11, 2010.<sup>77</sup>
2. Cell 4A has been in operation since at least November 11, 2010.<sup>78</sup>
3. Tailings were first placed in Cell 2 in 1980.<sup>79</sup>

---

its uranium content.”); Ex. 44 at 13 (same); Exs. 45, 46 at 3 (defining “[i]mpounded substance” to include process solutions).

<sup>72</sup> Ex. 12 at 26 (“Energy Fuels Resources admits that Cell 3 is a tailings impoundment as defined by Subpart W in operation since February 1, 2009.”); Ex. 44 at 16 (same).

<sup>73</sup> Ex. 12 at 26 (“Energy Fuels Resources admits that Cell 4A is a tailings impoundment as defined by Subpart W in operation since February 1, 2009.”); Ex. 44 at 16 (same).

<sup>74</sup> Ex. 17 at 14 (“Energy Fuels admits Cell 1 has from time to time received process solutions since February 1, 2009.”); Ex. 43 at 10 (same); Ex. 14 at EFR43535.

<sup>75</sup> Ex. 13 at 5–6 (“Cell 4B received process solutions primarily pumped from Cell 4A starting in January or February of 2011.”); Ex. 18 at DEQ52 (“Please take notice pursuant to 40 CFR 61.09(a)(2) that the actual date of initial startup of Cell 4B occurred on January 31, 2011...”); 40 C.F.R. § 61.02 (“Startup means the setting in operation of a stationary source for any purpose.”).

<sup>76</sup> Ex. 9 at 49:22–50:8, 63:18–64:16, 115:1–116:2; Ex. 16 at 160:15–162:2.

<sup>77</sup> Ex. 12 at 26 (“Energy Fuels Resources admits that Cell 3 is a tailings impoundment as defined by Subpart W in operation since February 1, 2009.”); Ex. 44 at 16 (same).

<sup>78</sup> Ex. 12 at 26 (“Energy Fuels Resources admits that Cell 4A is a tailings impoundment as defined by Subpart W in operation since February 1, 2009.”); Ex. 44 at 16 (same).

<sup>79</sup> Ex. 12 at 23 (“Cell 2 was first put into service in 1980...”); Ex. 44 at 14 (same); Ex. 14 at EFR43535 (showing a tailings placement period for Cell 2 of “1980–Mid 1980’s”).

4. Energy Fuels' Reclamation Plan Revision 3.2 – Final does not include milestones for retrieval of windblown tailings, interim stabilization of Cell 2 (including dewatering), or final radon barrier construction.<sup>80</sup>

5. Energy Fuels has proposed changes to Reclamation Plan Revision 3.2 – Final by submitting Reclamation Plan Revision 5.0 to the Radiation Division, and the Division has not yet approved Reclamation Plan Revision 5.0.<sup>81</sup>

6. The Radiation Division has not approved Energy Fuels' report on infiltration-and-contaminant-transport modeling that is required to ensure compliance with the minimum performance requirements in Section I.D.8. of the company's groundwater discharge permit.<sup>82</sup>

*Alternative C*

1. Cell 3 has been in operation since at least November 11, 2010.<sup>83</sup>

2. Cell 4A has been in operation since at least November 11, 2010.<sup>84</sup>

3. From at least November 11, 2010 through at least March 2014, Roberts Pond was used for the continued placement of process solutions.<sup>85</sup>

4. Process solutions are waste produced by the extraction or concentration of uranium from any ore processed primarily for its source material content.<sup>86</sup>

---

<sup>80</sup> Ex. 22 at EFR6398–424, EFR6457 (“Placement of cover materials will be based on a schedule determined by analysis of settlement data, piezometer data and equipment mobility considerations.”); Ex. 9 at 188:7–14.

<sup>81</sup> Ex. 9 at 166:25–167:22, 128:2–129:23; Ex. 16 at 171:13–23.

<sup>82</sup> Ex. 9 at 168:1–169:25, 174:9–21; Ex. 21 at EFR721–22 (closed-cell-performance requirements).

<sup>83</sup> Ex. 12 at 26 (“Energy Fuels Resources admits that Cell 3 is a tailings impoundment as defined by Subpart W in operation since February 1, 2009.”); Ex. 44 at 16 (same).

<sup>84</sup> Ex. 12 at 26 (“Energy Fuels Resources admits that Cell 4A is a tailings impoundment as defined by Subpart W in operation since February 1, 2009.”); Ex. 44 at 16 (same).

<sup>85</sup> Ex. 9 at 193:23–195:10, 200:12–201:1, 204:21–206:15; Ex. 47 at EFR21568–72.

<sup>86</sup> Ex. 12 at 19–20 (“Process solutions that are discharged to the mill's tailings impoundments or evaporation ponds are solutions that emanate from the extraction or concentration of uranium at the mill from any ore (including conventional ores and alternate feed materials) processed primarily for its uranium content and that are not tailings, as defined in Energy Fuels Answer to Interrogatory No. 14.”); Ex. 44 at 12 (same); Ex. 12 at 21 (“All impounded substances, other than 11e.(2) byproduct material received from third-party [in-situ recovery] facilities for direct disposal, are tailings or wastes produced by the extraction or concentration of uranium at the mill from any ore (including conventional ores and alternate feed materials) processed primarily for

*Alternative C1*

1. Cell 3 has been in operation since at least November 11, 2010.<sup>87</sup>
2. Cell 4A has been in operation since at least November 11, 2010.<sup>88</sup>
3. From at least November 11, 2010 through at least March 2014, Roberts Pond was used for the continued placement of sand-like wastes that result from the processing of uranium ore.<sup>89</sup>

---

its uranium content.”); Ex. 44 at 13 (same); Exs. 45, 46 at 3 (defining “[i]mpounded substance” to include process solutions).

<sup>87</sup> Ex. 12 at 26 (“Energy Fuels Resources admits that Cell 3 is a tailings impoundment as defined by Subpart W in operation since February 1, 2009.”); Ex. 44 at 16 (same).

<sup>88</sup> Ex. 12 at 26 (“Energy Fuels Resources admits that Cell 4A is a tailings impoundment as defined by Subpart W in operation since February 1, 2009.”); Ex. 44 at 16 (same).

<sup>89</sup> Ex. 9 at 193:23–195:10, 200:12–201:9, 204:21–206:15; Ex. 47 at EFR21568–72; Ex. 19 at EFR23930 (“They have managed to get a significant amount of dirt / tailings in Roberts Pond.”); Ex. 48 at EFR14063 (“[U]tility crew is cleaning out sands in roberts pond and disposing it into Cell 3.”); Ex. 16 at 176:24–177:25.

## STANDARD OF REVIEW

Summary judgment must be granted if “there is no genuine dispute as to any material fact and the movant is entitled to judgment as a matter of law.” Fed.R.Civ.P. 56(a).

## ARGUMENT

### **I. The citizen-suit provision of the Clean Air Act authorizes judicial relief against Energy Fuels for its Subpart W violations.**

The Clean Air Act authorizes citizen suits against anyone who is “alleged to have violated (if there is evidence that the alleged violation has been repeated) or to be in violation of ... an emission standard or limitation under [the Act].” 42 U.S.C § 7604(a). The phrase “emission standard or limitation” includes: (1) [an] emission limitation ... or emission standard, [and] (3) ... any requirement under section 7411 or 7412 of [Title 42] (without regard to whether such requirement is expressed as an emission standard or otherwise)...” *Id.* § 7604(f).

Subpart W is an “emission standard” within the meaning of 42 U.S.C. § 7604(f)(1). EPA promulgated Subpart W in response to Section 112’s command to set “emission standards” for hazardous air pollutants. Pub. L. 91-604 § 4(a), 84 Stat. 1685. The rule’s title and preamble bears that out: “National Emission Standards for Radon Emissions From Operating Mill Tailings.” 40 C.F.R. Pt. 61, Subpart W; 54 Fed. Reg. 51,654 (“This final rule announces the Administrator’s final decisions on National Emission Standards for Hazardous Air Pollutants (NESHAPs) under section 112 of the Clean Air Act for emissions of radionuclides...”). Because Subpart W as a whole is an “emission standard,” all its requirements at issue in the Trust’s claims for relief are enforceable in a citizen suit under the Act. *See also* 42 U.S.C. § 7602(k) (defining emission standard or limitation). Furthermore, Subpart W is also enforceable in a citizen suit as a “requirement under section ... 7412.” 42 U.S.C. § 7604(f)(3). Section 7412



requires that, “[a]fter the effective date of any ... regulation promulgated under this section and applicable to a source, no person may operate such source in violation of such ... regulation....” 42 U.S.C. § 7412(i)(3)(A). And Subpart W is a regulation promulgated under Section 7412 (i.e. Section 112 of the Clean Air Act). 54 Fed. Reg. 51,654.

Subpart W applies to “owners or operators of facilities licensed to manage uranium byproduct materials during and following the processing of uranium ores....” 40 C.F.R. § 61.250. EFR White Mesa owns the Mill, and EFR USA operates it. *See* Answers ¶ 9, ECF Nos. 33, 34. And the Mill has been licensed since at least 2007 through a radioactive materials license to manage uranium byproduct material during and following the processing of uranium ores. Ex. 37 at EFR613, EFR617 (§§ 6, 9.1, 9.8); Ex. 2 at EFR1501, EFR1505 (same).

## **II. The Trust gave sixty days’ notice of its intent to sue.**

On January 29, 2014, the Trust notified Energy Fuels, EPA, and the State of Utah that the Trust intended to bring a citizen suit against Energy Fuels for violating Subpart W. Ex. 35 at GCT1282–89. The Trust filed its complaint 63 days later. ECF No. 2.<sup>90</sup>

## **III. The Trust has standing.**

An association has constitutional standing “when its members would otherwise have standing to sue in their own right, the interests at stake are germane to the organization’s purpose, and neither the claim asserted nor the relief requested requires the participation of individual members in the lawsuit.” *Laidlaw*, 528 U.S. at 181.<sup>91</sup> Trust members would have

---

<sup>90</sup> The Trust sent another notice on July 29, 2014, of its intent to assert three more claims, Ex. 36 at EFR47121–32, and filed an amended complaint on October 15, 2014, ECF No. 29.

<sup>91</sup> The interests the Trust seeks to protect in this lawsuit are germane to the Trust’s purpose. Ex. 38 ¶¶ 2–7. Neither the claims asserted nor relief requested requires individualized proof. *See Sierra Club v. Tenn. Valley Auth.*, 430 F.3d 1337, 1345 (11th Cir. 2005).

standing if: 1) they have suffered an “injury in fact”; 2) the injury is “fairly traceable” to the defendant’s challenged actions; and 3) it is likely that the injury will be redressed by a favorable decision. *Id.* at 180–81. Standing is determined as of the outset of litigation. *Id.* at 180.

**A. Members of the Trust have suffered an injury in fact.**

Plaintiffs in environmental cases “adequately allege injury in fact when they aver that they use the affected area and are persons ‘for whom the aesthetic and recreational values of the area will be lessened’ by the challenged activity.” *Id.* at 183. “[R]easonable concerns about the effects” of a defendant’s polluting activities that affect a plaintiff’s interests satisfy the injury-in-fact requirement. *Id.* at 183–84; *Covington v. Jefferson Cnty.*, 358 F.3d 626, 638 (9th Cir. 2004) (“[E]ven if the only injuries alleged by the [plaintiffs] were threats to the aesthetic and recreational enjoyment of their property, these harms occasioned by ... violations [of federal law] in context are sufficient to satisfy the injury in fact requirement.”). Neither environmental harm, 528 U.S. at 181, nor adverse health effects need to be proved, *see Concerned Citizens around Murphy v. Murphy Oil USA, Inc.*, 686 F. Supp. 2d 663, 671 (E.D. La. 2010).

Trust members have been injured by the Mill’s activities challenged in this lawsuit. Several members live a few miles from the Mill, and the Mill’s radon emissions and operations detract from their activities or preclude them altogether. For example, Yolanda Badback and Thelma Whiskers, who are both members of the Ute Mountain Ute Tribe, have lived about five miles from the Mill their whole lives and plan to stay there indefinitely. Ex. 39 ¶¶ 1–2; Ex. 40 ¶ 1. When the Mill is running, they smell a bad chemical odor and see reddish smoke coming from the Mill. Ex. 39 ¶¶ 4, 6, 7; Ex. 40 ¶ 4. Dust often blows toward their house from the Mill. *Id.* Ms. Badback fears that breathing radon from the Mill will make them sick, a fear that has

gotten worse since she learned the Mill was violating Subpart W. Ex. 39 ¶ 6. Both worry about breathing the air and try to stay inside. Ex. 39 ¶¶ 6–7; Ex. 40 ¶ 4. Because of the Mill’s operations and radon emissions, they have changed how they gather plants for medicinal uses, and their family no longer hunts near the Mill for deer to eat. Ex. 39 ¶¶ 9–12; Ex. 40 ¶ 6.

Similarly, Bill Crowder and Ann Leppanen live part time in Bluff, a little less than 20 miles from the Mill. Ex. 41 ¶¶ 1–2; Ex. 42 ¶ 1. They made a sizable investment building their house in Bluff, eager to retire to the area, enjoy the surrounding natural environment, and create a place for their family to visit for generations. Ex. 41 ¶¶ 2–3, 9; Ex. 42 ¶¶ 3, 9. They frequently camp and explore the landscapes around their home and the Mill. Ex. 41 ¶¶ 4–6; Ex. 42 ¶¶ 5–6. Mr. Crowder and Ms. Leppanen get less pleasure out of their property, their home, and the red rock country surrounding it because they are concerned about the Mill’s radon emissions. Ex. 41 ¶¶ 7–9; Ex. 42 ¶¶ 7–9. Because of the Mill’s Subpart W violations, both have curtailed and continue to curtail how they use the area near the Mill. *Id.* For example, they both avoid camping, hiking, and searching for archeological features and rock art in areas close to the Mill. Ex. 41 ¶ 7; Ex. 42 ¶ 7.

The diminished use and enjoyment of the natural environment that these Trust members have suffered, along with the loss of enjoyment in their homes and land, satisfies the injury-in-fact standard. *See Concerned Citizens*, 686 F. Supp. 2d at 671 (“[Plaintiff’s] members ... may demonstrate a cognizable injury by showing that breathing, smelling and being reasonably concerned about the health effects of polluted air diminish their use and enjoyment of their property.”); *Hall v. Norton*, 266 F.3d 969, 976 (9th Cir. 2001) (“[A] credible threat to the plaintiff’s physical well-being from airborne pollutants falls well within the range of injuries to

cognizable interests that may confer standing.”). Indeed, the very purpose of Subpart W’s 20 pCi/(m<sup>2</sup>-sec) limit and work-practice standard is to prevent the significant cancer risk that arises when tailings piles dry out and remain uncovered. *See* 54 Fed. Reg. at 51,680–81. Trust members are injured by being directly confronted with that risk, worrying about it, altering their recreational and other day-to-day activities, and therefore getting less enjoyment out of the surrounding environment and their homes. *See Covington*, 358 F.3d at 637–641 (on Clean Air Act and other environmental claims, plaintiffs who lived near defendants’ landfill and whose “enjoyment of life and security of home” was “directly confronted with the risks that [federal law] sought to minimize” were injured in fact).

**B. These injuries are fairly traceable to the activities challenged in this lawsuit.**

The Trust’s members’ injuries are fairly traceable to the Mill’s operations and radon emissions. Those injuries have arisen directly from the Mill’s radon emissions, including those exceeding Subpart W’s numeric limit, and from Energy Fuels’ operation of more than two impoundments. *See, e.g.*, Ex. 39 ¶¶ 4–7, 10, 12; Ex. 40 ¶¶ 2–4, 6; Ex. 41 ¶¶ 7–9; Ex. 42 ¶¶ 7–9. The Mill’s operations, including its violations of Subpart W, thus cause the members’ injuries. *See Sierra Club v. Tri-State Generation & Transmission Ass’n, Inc.*, 173 F.R.D. 275, 280 (D. Colo. 1997) (“Plaintiff’s allegations—that defendants’ emissions impair its members’ ability to breathe clean air and view natural scenery and wildlife—clearly satisfy [the causation] requirement.”); *Sierra Club v. Cedar Point Oil Co.*, 73 F.3d 546, 556–57 (5th Cir. 1996) (holding that it was sufficient for plaintiff to show that defendant’s discharge of wastewater into Galveston Bay “contributes to the pollution that impairs [their] use of the bay”); *Sierra Club v. Env’tl. Prot. Agency*, 762 F.3d 971, 977–78 (9th Cir. 2014) (plaintiffs’ impending respiratory-

health injuries were fairly traceable to proposed permit to emit air pollutants where “remediating such injuries is exactly the purpose and function of these particular emissions limits, and more broadly, the Clean Air Act.”).

**C. The Trust’s members’ injuries are redressable.**

A favorable order from the Court would redress the Trust’s members’ injuries. An injunction requiring the company to properly measure and report radon flux and comply with the numeric limit and work-practice standard under Subpart W will force Energy Fuels to limit its radon emissions, eliminating the concern that has driven the Trust’s members’ diminished enjoyment of their homes and natural environment around the Mill. *See Env’tl. Prot. Agency*, 762 F.3d at 977–78; *Tri-State*, 173 F.R.D. at 281 (“Because plaintiff alleges that defendants’ emissions impair its members’ ability to breathe clean air and view natural scenery and wildlife, it necessarily follows that a reduction in the emissions would reduce the impairments plaintiff’s members allegedly suffer.”). Moreover, an injunction prohibiting Energy Fuels from using more than two impoundments is likely to curtail the Mill’s operations, reducing emissions from unreclaimed cells, emissions from the rest of the Mill, the Mill’s chemical stench, dust, truck traffic, harm to wildlife, and other impacts that negatively affect the Trust’s members. Indeed, Energy Fuels readily admits it needs more than two cells to run the Mill as it has historically run. Ex. 9 at 85:21–86:17, 90:11–92:14 (explaining need to maintain “water balance”—i.e., enough room in the tailings impoundments to hold wastes and evaporate solutions—and explaining that the Mill could not have continued to run in 2010 if Cell 4B had not been put into service).

Civil penalties likewise would redress the Trust’s members’ injuries. Those penalties, even if paid to the U.S. Treasury, eliminate the economic incentive a company has to avoid or

delay compliance with the law. *Laidlaw*, 528 U.S. at 185–86 (“To the extent that [civil penalties] encourage defendants to discontinue current violations and deter them from committing future ones, they afford redress to citizen plaintiffs who are injured or threatened with injury as a consequence of ongoing unlawful conduct.”); *Covington*, 358 F.3d at 641 (“Such [Clean Air Act] fines and penalties can cause [the defendant] to bring the landfill into compliance with the [Act].”). Ordering Energy Fuels to pay civil penalties will deter the company from violating Subpart W and is thus likely to alleviate the Trust’s members’ injuries relating to radon emissions, unreclaimed impoundments, excessive truck traffic, harms to wildlife and plants, and dust and chemical odors. Moreover, up to \$100,000 of civil penalties may be pledged to a “beneficial mitigation project” to “enhance the public health or the environment,” which can also redress those injuries. *See* 42 U.S.C. § 7604(g)(2).

The Trust has standing to pursue injunctive relief and civil penalties on all of its claims.

**IV. Energy Fuels has repeatedly violated Subpart W’s numeric emission limit.**

**A. Claim 1: Energy Fuels violated Subpart W by letting radon emissions from Cell 2 exceed Subpart W’s numeric limit in 2012 and 2013.**

Subpart W provides that “[r]adon-222 emissions to the ambient air from an existing uranium mill tailings pile shall not exceed 20 pCi/(m<sup>2</sup>-sec)...” 40 C.F.R. § 61.252(a). Energy Fuels violated this standard in 2012 and 2013 by letting average annual radon-222 emissions from Cell 2 exceed 20 pCi/(m<sup>2</sup>-sec).

**1. Cell 2 was an “existing uranium mill tailings pile” in 2012 and 2013.**

Cell 2 was an “existing uranium mill tailings pile” subject to the 20-picocurie emission standard in 2012 and 2013. An “existing impoundment” is “any uranium mill tailings impoundment which is licensed to accept additional tailings and is in existence as of

December 15, 1989.” 40 C.F.R. § 61.251(d).<sup>92</sup> Cell 2 was built before December 15, 1989. First. Am. Compl. ¶ 33, ECF No. 29; Defs.’ Answers ¶ 33, ECF Nos. 33, 34. And it has been licensed to accept additional tailings since the 1980s. Ex. 14 at EFR43529. Indeed, in its 2012 and 2013 Subpart W reports, Energy Fuels stated under penalty of perjury that Cell 2 was an “existing impoundment” as defined in 40 CFR 61.251.” Ex. 26 at GCT8876; Ex. 29 at GCT8232. And during its deposition in February 2016, Energy Fuels confirmed that Cell 2 was an “existing impoundment.” Ex. 16 at 62:15–63:3. Subpart W’s 20-picocurie emission limit thus applied to Cell 2 in 2012 and 2013.

**2. Radon-222 emissions from Cell 2 exceeded 20 pCi/(m<sup>2</sup>-sec) in 2012 and 2013.**

There is no dispute that Energy Fuels reported to the Utah Air Quality Division and EPA that Cell 2’s radon emissions exceeded Subpart W’s annual emission limit of 20 pCi/(m<sup>2</sup>-sec) in 2012 and again in 2013. Ex. 26 at GCT8875 (“The result of the 2012 radon-222 flux monitoring for Cell 2 was 25.9 pCi m<sup>-2</sup> s<sup>-1</sup> .... The measured radon flux from Cell 2 in 2012 therefore exceeded the standard set out in 40 CFR 61.252 of 20 pCi m<sup>-2</sup> s<sup>-1</sup>.”); Ex. 29 at GCT8228 (“The result of the 2013 radon-222 flux monitoring for Cell 2 was 20.4 pCi/(m<sup>2</sup> -sec) ... which exceeds the 20 pCi/(m<sup>2</sup>-sec) set out in 40 CFR 61.252(a) for the year.”). Based on those reports, the Air Quality Division concluded that Energy Fuels violated Subpart W in 2012 and again in 2013. Ex. 26 at GCT8871 (“Status: In violation. The annual report indicated that Cell #2 exceed[ed] the 20 pCi m<sup>2</sup> -s of radon-222 in June, 2012.”); Ex. 29 at GCT8226 (same for 2013).

Energy Fuels’ self-reported violations of Subpart W’s radon-emission limit in 2012 and

---

<sup>92</sup> The phrase “existing uranium mill tailings pile” is not in Subpart W’s definitions, but “existing impoundment” is. And the preamble to Subpart W is clear that EPA intended the 20-picocurie limit to apply to “existing impoundments.” 54 Fed. Reg. at 51,680 (using the words “impoundment” and “pile” synonymously).

2013 are conclusive admissions that Energy Fuels is liable on the Trust's first claim for relief. *See Concerned Citizens*, 686 F. Supp. 2d at 679–80 (granting summary judgment to plaintiffs in Clean Air Act citizen-suit based solely on defendant's reports that it made unauthorized discharges); *St. Bernard Citizens v. Chalmette Refining*, 354 F. Supp. 2d 697, 706–07 (E.D. La. 2005) (same); *Sierra Club v. Pub. Serv. Co. of Colo., Inc.*, 894 F. Supp. 1455, 1458–61 (D. Colo. 1995) (granting summary judgment to citizen-plaintiff based on defendants' emission reports that were undisputed evidence of Clean Air Act violations); *Friends of the Earth v. Potomac Elec. Power Co.*, 419 F.Supp. 528, 533 (D.D.C. 1976) (finding no issue of fact as to 24 visible-emission incidents reflected in defendant's records).

The Court should enter summary judgment for the Trust on its first claim for relief.

**B. Claim 5: Cell 3's radon emissions exceeded Subpart W's numeric limit in 2013.**

When the radon flux from Cell 3 in 2013 is calculated properly, Energy Fuels violated Subpart W's numeric emission limit by letting the average annual radon emissions from Cell 3 exceed 20 pCi/(m<sup>2</sup>-sec).<sup>93</sup> *See* 40 C.F.R. § 61.252(a)

During 2013, only in June did Energy Fuels take valid radon-flux measurements from Cell 3. Though Energy Fuels took more radon-flux measurements in September and December, as explained below in Sections IV.C. and IV.D. (pp. 38–42), those measurements were invalid because they were improperly scheduled and because Energy Fuels sampled only the cover region and not the beach. When the company reported the results to the Air Quality Division, it calculated a faux average radon flux for September and December by combining the June beach

---

<sup>93</sup> Cell 3 was an “existing impoundment” subject to Subpart W's 20 pCi/(m<sup>2</sup>-sec) numeric emission standard in 2013. Ex. 17 at 13–14 (“Energy Fuels Resources admits Cell 3 was an existing impoundment as of December 15, 1989 and remains to this day licensed to accept additional tailings.”); Ex. 43 at 10 (same); Ex. 29 at GCT8232.



measurement with the September and December cover measurements. *See infra* Section IV.D. (pp. 40–42). Those calculations were invalid. They relied on impermissible measurement events and incomplete sampling during those events, and they were thus not representative of the pile’s total radon flux.

Because the September and December radon-flux calculations are invalid, the properly conducted June measurement of 22.7 pCi/(m<sup>2</sup>-sec), Ex. 30 at GCT8293, is the annual average radon flux for the cell in 2013. This self-reported violation of Subpart W’s numeric radon-emission limit is a conclusive admission that Energy Fuels is liable on the Trust’s fifth claim for relief. *See* cases cited *supra* Section IV.A.2. (p. 37). The Court should thus enter summary judgment against Energy Fuels on the Trust’s fifth claim for relief.

**C. Claim 3: Energy Fuels violated Subpart W’s sampling-schedule requirements.**

Uranium-mill owners and operators who plan to sample radon flux more than once in a year must send EPA “a schedule of the measurement frequency to be used.” 40 C.F.R. § 61.253. “The schedule may be submitted to EPA prior to or after the first measurement period.” *Id.* Energy Fuels violated this requirement in 2013 by sending EPA three sampling schedules for Cell 3: one in April that said Energy Fuels would perform an “annual sampling event” in June; and then, after the June sample yielded a result above 20 pCi/(m<sup>2</sup>-sec), a second schedule in July and a third in September that included two more sampling events later in the year.

Under the plain language of 40 C.F.R. § 61.253, mill owners and operators are not allowed to submit more than one radon-flux-sampling schedule for each calendar year. That section of Subpart W calls for submission of “a schedule”—meaning a single schedule—setting out the “measurement frequency to be used” for the year. 40 C.F.R. § 61.253. True enough,

“[t]he schedule” may be submitted before or after the first measurement period. *Id.* But that does not allow submission of one schedule before the first measurement period and a second, different schedule after the first measurement period. The phrase “before *or* after the first measurement period” is disjunctive; the schedule may be submitted before or after the first measurement period, but not both. *See Chevron Oil Co. v. Barlow*, 406 F.2d 687, 692 (10th Cir. 1969).

This one-schedule limitation in Subpart W makes sense. After all, letting operators change already submitted sampling schedules whenever they get noncompliant results would allow them to manipulate the annual sampling results by taking more and more samples in an attempt to bring down the average. Subpart W’s measurement protocol plainly expects operators to sample at regularly planned intervals: weekly, monthly, quarterly, or annually. Method 115 § 2.1.1. And making operators live with the results of the schedule they choose creates an incentive for them to regularly monitor and control radon emissions.

Energy Fuels did not sample Cell 3 at regularly planned intervals in 2013. Instead, it scheduled one annual sample, and only after getting a noncompliant result, scheduled two more. On April 11, 2013, Energy Fuels submitted to the Air Quality Division and EPA a measurement schedule for Cell 3 that notified the agencies that Energy Fuels would perform an “[a]nnual sampling event” between June 10 and June 13, 2013. Ex. 31 at EFR35264. Energy Fuels took those samples as planned and got a result of 22.7 pCi/(m<sup>2</sup>-sec). Ex. 32 at EFR24924. Since this result was “a little above the standard,” the company’s radon-flux contractor made a suggestion:

[I]f it is permissible, I think we could do some spot cleanup in a few areas and then resample just the involved sample locations. ... If we can get the radon flux at these 6 locations down to 20 pCi/m<sup>2</sup>-s, the Cell 3 average would drop to around 17.4 pCi/m<sup>2</sup>-s.

Ex. 32 at EFR24924. So Energy Fuels decided to take more samples. *See* Ex. 30 at GCT8318.<sup>94</sup> The company sent two more schedules to the Division and EPA adding two more sampling events to the 2013 schedule. Ex. 33 at EFR992–93; Ex. 34 at EFR1067. Energy Fuels ultimately took radon-flux samples from Cell 3 in September and December 2013 and used the results in calculating the average annual radon flux for Cell 3. Ex. 30 at GCT8318, GCT8351.

Energy Fuels indisputably changed its 2013 sampling schedule for Cell 3 after getting a result in June above 20 pCi/(m<sup>2</sup>-sec). That was a violation of Subpart W. *See* 40 C.F.R. § 61.253. Liability under the Clean Air Act is strict. *See Pound v. Airosol Co.*, 498 F.3d 1089, 1097 (10th Cir. 2007). The Court thus should grant the Trust summary judgment on its third claim for relief.

**D. Claim 4: Energy Fuels violated Subpart W’s sampling methods in 2013.**

Every time mill owners and operators measure radon flux, they are required to sample all regions of each impoundment except for water-covered areas and dikes that are made of dirt. Energy Fuels violated this requirement in 2013 by failing to take radon-flux measurements from the beach region of Cell 3 in September and December 2013.

Compliance with Subpart W’s 20 pCi/(m<sup>2</sup>-sec) limit must be determined using Method 115. 40 C.F.R. § 61.253. Method 115 says that “[a]ll radon measurements shall be made as described in paragraphs 2.1.2 through 2.1.6...” of the method. Method 115 § 2.1.1 (emphasis added). Those paragraphs include the mandate that radon-flux measurements be made “within

---

<sup>94</sup> It is obvious the company scheduled extra samples in an attempt to bring the annual average radon flux below 20 pCi/(m<sup>2</sup>-sec). Ex. 30 at GCT8318 (observing that June 2013 radon flux was over 20 pCi/(m<sup>2</sup>-sec), “and in response, Energy Fuels has begun conducting radon flux measurements for Cell 3 covered region on a quarterly basis...”); Ex. 16 at 95:12–96:17 (confirming that this statement accurately describes the company’s position). Ex. 49 at GCT11820 (e-mails from Air Quality Division confirming the company “fail[ed] the first test” and conducted more tests to “average out the high test”).

each region on the pile, except for those areas covered with water.” Method 115 § 2.1.3. Regions are “clearly defined areas of the pile” that include water-covered areas, water-saturated areas (beaches), dry top-surface areas (a.k.a. “cover”), and sides (except those made of earthen material). Method 115 § 2.1.2. Taken together, these provisions require that, for all radon measurements that are made throughout the year, radon flux must be measured for each region on the pile, except water-covered areas and sides built of dirt.

This requirement is reinforced by how Method 115 requires the annual average radon flux to be calculated. Annual radon flux is the average of “the mean radon flux for each measurement period.” Method 115 § 2.1.1. That is, to get the pile’s average annual radon flux, Method 115 says to first calculate the mean radon flux for each measurement period. This step is done by averaging the radon flux from each region, weighted by region size, like this:

$$(\text{measurement period radon flux}) = \frac{(\text{beach radon flux})(\text{beach size}) + (\text{cover radon flux})(\text{cover size})}{(\text{total size of the impoundment})}$$

Method 115 § 2.1.7(b); Method 115 § 2.1.2 (requiring the mean radon flux to “be determined for each individual region of the pile”). This calculation is *impossible* without measuring every region of the pile. If measurements from one region are not taken, the radon flux for that region is an unknown quantity in the equation. And without that number, the average for the period simply cannot be calculated.

Requiring measurements from every region during all sampling events is also sound policy. It ensures that radon-flux sampling is consistent and representative whenever it is performed and prohibits the sort of selective sampling that Energy Fuels’ contractor proposed in 2013 to get Cell 3’s average to drop. That forces mill operators not just to reduce radon flux from

out-of-compliance regions but to keep in-compliance regions from rising above 20 pCi/(m<sup>2</sup>-sec), and ultimately to reduce radon-222 emissions from the *whole pile* to 20 pCi/(m<sup>2</sup>-sec).

During September and December 2013, Energy Fuels took radon-flux measurements only from Cell 3's covered region (the "dry top surface") and did not sample the beach. Ex. 30 at GCT8318, GCT8320, GCT8351, GCT8353. The company then calculated Cell 3's radon flux for September and December by combining the June beach measurements with the September and December cover measurements. Ex. 30 at GCT8318, 8351. Failing to sample the beach region during September and December 2013 violated Method 115's requirement that the cover and beach regions both be sampled during every sampling event. *See* Method 115 §§ 2.1.1 to 2.1.3. That violated Subpart W, both in September and again in December. *See* 40 C.F.R. § 61.253 (requiring compliance with Method 115). Summary judgment for the Trust therefore should be entered on the Trust's fourth claim for relief.

**V. Claim 2: Energy Fuels has been violating Subpart W by operating more than two impoundments.**

Uranium mill owners and operators who build (and license) tailings impoundments after December 1989 and manage their impoundments using "phased disposal" are allowed to have only two impoundments, including existing impoundments, in "operation" at any given time. 40 C.F.R. § 61.252(b)(1).<sup>95</sup> Energy Fuels triggered this limit, at the latest, when it finished building Cell 4B on November 11, 2010. Ex. 17 at 6. The company has been violating it ever since by operating Cells 1, 2, 3, 4A, 4B, and Roberts Pond (at least until March 2014).

**A. Cells 3 and 4A have been in "operation" since at least November 11, 2010.**

Energy Fuels has admitted that Cells 3 and 4A are impoundments that have been in

---

<sup>95</sup> Energy Fuels uses "phased disposal" at the Mill. Defs.' Answers ¶ 33, ECF Nos. 33, 34.

“operation” under Subpart W since at least the beginning of 2009. Ex. 12 at 26 (“Energy Fuels Resources admits that Cell 3 [and Cell 4A are] tailings impoundment[s] as defined by Subpart W in operation since February 1, 2009.”); Ex. 44 at 16 (same).

**B. Cells 1 and 4B have been in “operation” since the day Energy Fuels first put “process solutions” into those cells.**

Cells 1 and 4B are also in “operation” under Subpart W because Energy Fuels places process solutions in those cells. “Operation” means that:

an impoundment is being used for the continued placement of new tailings or is in standby status for such placement. An impoundment is in operation from the day that tailings are first placed in the impoundment until the day that final closure begins.

40 C.F.R. § 61.251(e). “Tailings” and “uranium byproduct material” are defined synonymously to mean “the waste produced by the extraction or concentration of uranium from any ore processed primarily for its source material content.” 40 C.F.R § 61.251(g).

Energy Fuels has been placing process solutions into Cell 1 since 1981, Ex. 14 at EFR43535, and it began placing them into Cell 4B on January 31, 2011. *See supra* p. 5.

**1. Process solutions are “tailings” under Subpart W.**

Energy Fuels admits that “process solutions” are “wastes produced by the extraction or concentration of uranium at the mill from any ore (including conventional ores and alternate feed materials) processed primarily for its uranium content.” Ex. 12 at 21 (“All impounded substances ... are tailings or wastes produced by the extraction or concentration of uranium at the mill from any ore (including conventional ores and alternate feed materials) processed primarily for its uranium content.”); *id.* at 19–20 (“Process solutions that are discharged to the mill’s tailings impoundments or evaporation ponds are solutions that emanate from the extraction or concentration of uranium at the mill from any ore (including conventional ores and alternate feed

materials) processed primarily for its uranium content and that are not tailings, as defined in Energy Fuels Answer to Interrogatory No. 14.”); Ex. 44 at 12, 13 (same); Exs. 45, 46 at 3 (defining “[i]mpounded substance” to include process solutions).

The “process solutions” that the company has been pumping into Cells 1 and 4B are therefore “tailings” under the plain language of Subpart W. *See* 40 C.F.R. § 61.251(g). Cells 1 and 4B accordingly have been in “operation” under Subpart W since the day Energy Fuels first put process solutions into them. *See id.* § 61.251(e). And, by having Cells 1, 3, 4A, and 4B in operation, the company has been violating Subpart W’s two-impoundment limit since it triggered the phased-disposal work-practice standard by building Cell 4B in November 2010. *See id.* 40 C.F.R. § 61.252(b). For this reason alone, the Trust is entitled to summary judgment on its second claim for relief, though as explained in Sections V.C. and D. (pp. 49–54) below, Cell 2 and Roberts Pond also have been in operation after November 11, 2010.

## **2. “Tailings” are not just “sand-like wastes.”**

Energy Fuels argues that the word “tailings” in Subpart W really means only the “sand-like wastes that result from the processing of uranium ore at the ... Mill [that] are conveyed in slurry form through the tailings pipelines for disposal in the operating tailings impoundments....” Ex. 15 at 7. From that premise, the company argues that Cells 1 and 4B do not hold “tailings” and thus are not in “operation.” This is wrong for at least five reasons.

First, it contradicts the plain language of Subpart W. Tailings are “the waste,” not just the “sand-like waste,” that is produced by extracting or concentrating uranium from ore. 40 C.F.R. § 61.251(g). EPA first adopted Subpart W’s definition of “tailings” in the 1986 final Subpart W rule, which imposed a work-practice standard with the same two-impoundment limit that is in

the 1989 standard.<sup>96</sup> At the time, EPA knew how to describe tailings as “sand-like wastes” if it wanted to. Yet in a background document supporting the 1986 rulemaking, EPA was crystal clear that it meant “tailings” to refer to *all* wastes left over from processing uranium ore, including process solutions:

With the exception of the uranium extracted during milling, the dry weight of the tailings represents the total dry weight of the processed ore. Ore contains only about 0.1 percent uranium; therefore, the tailings consist of 99.9 percent of the ore, including all the radioactive decay products. The tailings discharge is composed of three fractions: (1) the sands, which consist of solids greater than 200 mesh (74 mm); (2) the slimes, which consist of solids less than 200-mesh; and (3) *the liquid solution containing milling reagents and dissolved ore solids.*

Ex. 50 at GCT525 (emphasis added); *id.* at GCT535 (“Tailings include the barren crushed ore material *plus process solutions*. ... Evaporation ponds used to contain excess liquid from tailings impoundments also contain suspended and dissolved tailings and are included in this analysis.”) (emphasis added). This background document makes clear that EPA intended for its definition of “tailings” in Subpart W to have the plain meaning EPA assigned to that term: all “waste” produced by processing uranium.

Second, in the 1986 Subpart W rulemaking record, EPA described the “process solutions” in Cell 1 at the Mill as “tailings.” EPA explained that about 550,000 tons of “*tailings* are contained in three cells of a proposed six-cell disposal system” at the Mill. Ex. 50 at GCT564 (emphasis added). The only cells the Mill had in 1986 were Cells 1, 2, and 3. Ex. 16 at 183:7–15. And, given that Energy Fuels says it has never put anything in Cell 1 except process solutions, *see* Ex. 14 at EFR43535, EPA’s statement that there were “tailings” in Cells 1, 2, and 3, means that EPA considered the process solutions in Cell 1 to be “tailings.”

---

<sup>96</sup> “Tailings” has the same definition in the 1986 and 1989 standards. 51 Fed. Reg. at 34,066.



Third, EPA still interprets Subpart W's two-impoundment limit to apply to "evaporation ponds," like Cells 1 and 4B. As EPA said in a 2014 proposed rulemaking to revise Subpart W: The "evaporation ponds located at conventional mills ... contain uranium byproduct material, either in solid form or dissolved in solution, and therefore their emissions are regulated under Subpart W." 79 Fed. Reg. 25,388, 25,397 (May 2, 2014). *See also id.* at 25,391 (explaining that conventional milling "produces both solid and liquid wastes (i.e., uranium byproduct material, or 'tailings')..."); *id.* at 25,394 (stating that the hazardous air pollutant emissions from Cell 1 at the Mill are currently regulated by Subpart W "[t]o the extent [it] contains byproduct material.").

Fourth, as a matter of practice, "process solutions" and "sand-like" tailings are not distinct waste streams at the Mill. The "process solutions" in Cell 4B have come *solely* from the tailings slurry discharged into Cell 4A from the counter-current-decantation circuit. Ex. 9 at 25:8–26:24. After the slurry is in Cell 4A, liquids sort of ooze toward one side of the cell, leaving the solids (or most of them) on the other side. Ex. 9 at 29:15–30:22; Ex. 16 at 162:3–164:14. When enough liquid builds up, Energy Fuels starts a siphon built into the dam between the cells to suck the liquid into Cell 4B. Ex. 9 at 30:23–32:9. And *presto*, according to Energy Fuels, "tailings" become "process solutions" that are no longer regulated by Subpart W.

As Energy Fuels reads Subpart W, the company transmutes tailings into process solutions by moving them into Cell 1 too. To keep cells from getting too full, Energy Fuels often pumps solutions among impoundments. Ex. 9 at 59:4–14. Thus, at least some solutions in Cell 1 were once part of the tailings slurry that went into Cells 3 and 4A. *See, e.g.*, Ex. 51 at EFR9046 ("transfer sol. from C3 into C1"), EFR9050 ("transferring solutions from C3 & C4A into C1.").

The Court should reject this regulatory alchemy. The tailings that Energy Fuels puts into

Cell 4A are no less tailings because they go through a low-tech gravity separation and are sucked through a tube into Cells 1 or 4B. Indeed, day-to-day the company often calls process solutions “tailings.” *See* citations *supra* p. 5. The Court should do the same in interpreting Subpart W.

Fifth, as a matter of policy, the word “tailings” should not be construed to exempt “evaporation ponds” from Subpart W’s two-impoundment limit. The whole point of Subpart W was to minimize the surface area of radon-emitting wastes that could dry out and pose “dramatically” increased health risks. 54 Fed. Reg. at 51,680. There is no dispute that solutions in evaporation ponds contain dissolved solids, including uranium and its radioactive decay products like radium-226, which decays into radon-222. Ex. 9 at 40:5–41:5, 120:21–24; Ex. 16 at 147:8–148:11, 160:15–162:2. There is also no dispute that, after enough evaporation, dissolved solids eventually precipitate out of process solutions, settling in the form of “raffinate crystals” on the bottom of the ponds, much like relict salt deposits from Lake Bonneville. Ex. 9 at 49:22–50:8, 63:18–64:16, 115:1–116:2. And there is no dispute that those ponds can at least partially, if not fully, dry out while in operation. After all, in 1990, Energy Fuels used Cell 4A for about a year to dispose of process solutions, but then let those solutions evaporate, leaving somewhere around 100,000 cubic yards of dried out raffinate crystals on the bottom of the cell for the next *fifteen years*. Ex. 9 at 61:7–64:16; Ex. 16 at 151:16–152:23, 155:15–25; Ex. 8 at EFR647. Similarly, enough solution has evaporated from Cell 1 on at least one occasion to partially expose the bottom of the cell. Ex. 9 at 112:14–113:16, 229:12–231:11; Ex. 52. Thus, it makes perfect sense that EPA would use Subpart W’s work-practice standard to limit the size and potential risks posed by “tailings-sands” impoundments and “evaporation ponds” alike.

For all these reasons, the Court should reject the idea that the word “tailings” in

Subpart W means only “sand-like wastes” and instead adopt the plain definition EPA gave that word: “the waste produced by the extraction or concentration of uranium from any ore processed primarily for its source material content.” 40 C.F.R. § 61.251(g).

### **3. Energy Fuels disposes of “sand-like wastes” in Cells 1 and 4B.**

Because sand-like wastes precipitate out of the solutions in Cells 1 and 4B when solutions evaporate, even under Energy Fuels’ interpretation of the word “tailings,” the company is disposing of tailings in Cell 1 and Cell 4B. As explained above in Section V.B.2. (p. 47), Energy Fuels admits that dissolved solids, including uranium, eventually precipitate out of the solutions in Cells 1 and 4B and settle as “raffinate crystals” on the bottom of those impoundments. *See supra* p. 47. Placing these dissolved solids that become sand-like wastes into Cells 1 and 4B is enough to put those cells in “operation” under Subpart W.

It is true that raffinate crystals do not come straight out of the counter-current-decantation circuit like “sand-like” tailings. But that distinction is trifling. When Energy Fuels dug up the raffinate crystals that sat on the bottom of Cell 4A from about 1990 to 2006, it buried them in Cell 3 because they were contaminated with uranium. Ex. 9 at 64:4–65:13; Ex. 3 at 48:12–18. Similarly, when Cell 1 is retired, Energy Fuels has estimated that up to 140,000 cubic yards of raffinate crystals will be left behind—enough to cover 26 football fields a yard deep. Ex. 16 at 139:22–144:3. The company plans to get rid of those contaminated crystals in any open cell that holds sand-like tailings. Ex. 9 at 157:4–158:24; Ex. 22 at EFR6407. So the company ultimately treats these sand-like raffinate crystals exactly the same as sand-like tailings that go into Cells 3 and 4A. The Court consequently should treat the “evaporation ponds” that hold those incipient crystals as impoundments being used for the continued placement of tailings. For this reason too,

Cells 1 and 4B are in “operation” under Subpart W.

**C. Cell 2 is in “operation” because its “final closure” has not begun.**

An impoundment is in “operation” under Subpart W “from the day that tailings are first placed in the impoundment until the day that final closure begins.” 40 C.F.R. § 61.251(e). When using phased disposal under Subpart W, impoundments that are filled must be “immediately dried and covered to meet all applicable Federal standards.” 40 C.F.R. § 6.251(g). Federal reclamation standards (which Utah has adopted), require mill operators to carry out an approved reclamation plan that meets specified criteria and has deadlines for certain steps in the closure process. 10 C.F.R. Pt. 40, Appx. A (“Appendix A”); 40 C.F.R. § 192.32; Utah Admin. Code R313-24-4 (incorporating pertinent parts of Appendix A by reference). Energy Fuels’ reclamation plan does not meet these requirements. The company therefore cannot have begun “final closure” of Cell 2. Indeed, the Mill’s groundwater discharge permit *prohibits* Cell 2’s closure until Energy Fuels’ cover design will comply with an approved reclamation plan and *additional* performance requirements that have not been met. The cell thus remains in operation.

The Nuclear Regulatory Commission, EPA, and State of Utah have all adopted regulations specifying how final closure of tailings impoundments must be accomplished. *Id.* Those regulations require mill operators to expeditiously cover nonoperational impoundments with a “final radon barrier” designed with “reasonable assurance” to work for at least 200 years and to limit average releases of radon-222 to 20 pCi/(m<sup>2</sup>-sec). *See* Appendix A, Criteria 6 & 6A; 40 C.F.R. § 192.32(a)(3)(i), (b)(1). Deadlines for finishing the final radon barrier, retrieving windblown tailings, and stabilizing the tailings pile (including dewatering the pile) are to be established in a reclamation plan and as conditions of each mill’s radioactive materials license.

See Appendix A, “Reclamation Plan” and Criterion 6A.

Although the Nuclear Regulatory Commission and Radiation Division have “approved” a few versions of Energy Fuels’ reclamation plan in the past two decades, none of those plans includes deadlines for completing the final radon barrier or any other steps in the cell-closure process. When Energy Fuels stopped putting wastes in Cell 2 in 2008, the Mill’s Radioactive Materials License required “final reclamation” to be in accordance with Reclamation Plan Revision 3.0. Ex. 37 at EFR617. But neither that License nor Plan Revision 3.0 had any deadlines for cell closure. Ex. 37; Ex. 53 at EFR53587–611, 53645 (“Placement of cover materials will be based on a schedule determined by analysis of settlement data, piezometer data and equipment mobility considerations.”); Ex. 9 at 188:7–14.

In fact, back in 2008, the Division and Energy Fuels were still working out the Plan’s design specifications for the final radon barrier. More than a decade ago, the Division ordered Energy Fuels to submit an infiltration-and-contaminant-transport-modeling report so that the final radon barrier could be designed to meet “minimum performance requirements” to minimize buildup of precipitation in the cell and protect groundwater quality. Ex. 9 at 168:1–169:25; Ex. 54 at GCT5547. But the Division still has not approved that report. Ex. 9 at 174:9–21.

And the Mill’s whole reclamation plan is still being revised. Ex. 9 at 166:25–167:22, 128:2–129:23; Ex. 16 at 171:13–23. Since 2008, the Division has approved minor revisions to version 3.0. Ex. 9 at 73:18–74:1. The currently “approved” version of the Plan—Revision 3.2 – Final—also lacks deadlines for any steps in the closure process. Ex. 22 at EFR6398–424, EFR6457; Ex. 9 at 188:7–14. And even as that revision was being “approved,” the Division and the company were working on more changes to the Plan. Ex. 16 at 171:24–173:12. They are now

up to Revision 5.0, which the Division also has not yet approved. Ex. 16 at 171:13–23.

Because Energy Fuels' reclamation plan is still being revised to update the final-radon-barrier design and the plan lacks required deadlines, the company cannot begin "final closure" of Cell 2. It simply is not possible for Energy Fuels to expeditiously place a final radon barrier whose design is still being worked out using a plan that is still being revised. And the lack of deadlines in the company's plan is not just a harmless error. Deadlines are to be included in reclamation plans so that tailings cells are closed quickly. *See* Appendix A, Criterion 6A; 40 C.F.R. § 192.32(a)(3)(i). They can be extended, but only after allowing public participation, only after finding that radon-222 releases from the impoundment are less than 20 pCi/(m<sup>2</sup>-sec) on average, only if radon-222 emissions are monitored annually during the period of delay, and if an extension for placing the final radon barrier is sought based on cost, only after even more criteria are met. *See* Appendix A, Criterion 6A(2). Without any closure deadlines, Cell 2 has been sitting mostly full of tailings since the mid-to-late 1980s and may yet take a decade or more to close. That is totally contrary to the expeditious-closure regime set up by federal law.

Furthermore, the Mill's groundwater discharge permit *prohibits* Energy Fuels from closing "any tailings disposal cell" until the company has ensured that the "final design, construction, and operation of the cover system at each tailings cell will comply with all requirements of an approved Reclamation Plan" and meet additional "minimum performance requirements" for protecting groundwater. Ex. 21 at EFR721–22 (closed-cell-performance requirements). Because the company's "approved" reclamation plan is being revised, Energy Fuels has not complied with this requirement, for it cannot show that whatever final cover system is ultimately adopted will comply with the requirements of whatever reclamation plan is

ultimately approved. Regardless, since the Division has not yet approved Energy Fuels' infiltration-and-contaminant-transport-modeling report, the company has not ensured that the cover system will meet the additional minimum performance requirements. And, for that reason alone, Energy Fuels has not begun closing and cannot close Cell 2. *See* Ex. 16 at 173:13–174:6.

It is not as if the company has properly closed Cell 2 despite the inadequacies in its reclamation plan. Instead, in March 2008, the company finished covering the cell with a four-foot layer of soil that it had been slowly advancing over the cell since the late 1980s. Ex. 16 at 166:13–167:6. Because the cell must stabilize by drying out before Energy Fuels places the six-foot “final radon barrier,” Ex. 9 at 179:19–180:12, around 2007 or 2008, the company started pumping excess liquid out of the cell. Ex. 16 at 168:7–17; Ex. 55 at 6–7. It will probably take about ten years, maybe more, to pump most of the liquid out of Cell 2. Ex. 16 at 33:10–34:16; Ex. 56 at GCT11759–60 (dewatering estimate referenced in deposition testimony). No doubt, some of these tasks, like dewatering and placing an initial layer of cover, *might* ultimately be part of Cell 2's final closure. But it is hard to see how starting them could initiate “final closure” when there is no final reclamation plan to check them off against. Dewatering, for example, is not even mentioned in the “approved” Plan Revision 3.2. Ex. 22 at EFR6398–424. And because the final radon barrier is still being redesigned, Ex. 9 at 128:2–129:23, 166:2–168:25, there is no guarantee that what Energy Fuels has done so far to cover Cell 2 will be up to snuff when a final plan is approved.

Because final closure of Cell 2 has not begun, the cell is still in “operation” under Subpart W. *See* 40 C.F.R. § 61.251(e). The Court therefore should enter summary judgment for the Trust on the grounds that Energy Fuels has had Cells 1, 2, 3, 4A, and 4B in operation in

violation of the two-impoundment limit since at least November 11, 2010.

**D. Roberts Pond was in “operation” until at least March 2014.**

At least until Energy Fuels dug up Roberts Pond, it was also in “operation” under Subpart W because Energy Fuels regularly put wastes from the uranium-extraction process in the pond. As explained above (p. 6), solutions that spilled or were intentionally diverted out of the Mill’s process circuits due to problems were routinely pumped to Roberts Pond. Ex. 9 at 193:23–195:10. In April 2012, for example, a big tank in the counter-current-decantation circuit called the “claricone” fell apart, spilling a nearly 28,000-gallon mixture of water, sulfuric acid, and uranium salts. Ex. 47 at EFR21568–72. Energy Fuels pumped about 2,100 gallons of that spill into Roberts Pond. Ex. 47 at EFR21570. Solutions from spills like this soaked into sediment that built up in the Pond, contaminating it with uranium. Ex. 9 at 200:12–201:1, 204:21–206:15.

Energy Fuels will argue that Roberts Pond was just “part of the mill’s process operations...” and the process solutions and other materials that went into it were not wastes. Ex. 12 at 18–19. But Energy Fuels’ own account of how it managed the substances in Roberts Pond belies that argument. First off, Energy Fuels’ Executive Vice President of Operations—a senior officer of the company who has been involved with the Mill since helping to design it in the 1970s—called the muck the company dug out of Roberts Pond in 2012 “dirt / tailings.” Ex. 19 at EFR23930. Second, the company let that “dirt / tailings” sit on the bottom of Roberts Pond for ten years, from 2002 until 2012. Ex. 10 at EFR21069. If it was “part of the mill’s process operations,” why not process it for a full decade? Third, though the company claims some uncertainty about what it did with the “dirt / tailings” it dug out of Roberts Pond in 2012, Energy Fuels’ contemporaneous records say the company disposed of at least some of it in



Cell 3. Ex. 48 at EFR14063. Those records even describe the “dirt / tailings” as “sands.” *Id.* (“[U]tility crew is cleaning out sands in roberts pond and disposing it into Cell 3.”). Energy Fuels does not dispute this fact. According to the company, it probably processed some of the “dirt / tailings” and got rid of the rest in one of the tailings disposal cells. Ex. 16 at 176:24–177:25.

Placing waste process solutions in Roberts Pond was enough to put the pond in “operation” under Subpart W. *See supra* pp. 43–44; 40 C.F.R. § 61.251(g). But regardless, the company indisputably let contaminated “dirt / tailings” build up in the pond before eventually burying at least some of them with other “sand-like tailings” in Cell 3. That means the solid substances in Roberts Pond were Subpart W “tailings,” even under Energy Fuels’ warped interpretation of that term. *See* 40 C.F.R. § 61.251(g). Indeed, *only* waste produced by extracting or concentrating uranium from ore may be put in the tailings cells. Ex. 21 at EFR709, 721 (authorizing disposal only of “11.e.(2) by-product material ... in the tailings ponds,” which is defined as waste produced from extracting uranium from ore). The Pond was accordingly in “operation” under Subpart W from at least November 11, 2010, until at least March 2014. Summary judgment thus should enter for the Trust on its second claim for relief on the grounds that Roberts Pond was in operation, along with Cells 1, 2, 3, 4A, and 4B.

### CONCLUSION

The Court should reject Energy Fuels’ efforts to shoehorn its noncompliant operations into Subpart W’s requirements by stretching Subpart W’s language beyond its limits. Applying the plain language of Subpart W to Energy Fuels’ admitted conduct yields but one conclusion: Energy Fuels is liable on all the Trust’s claims. Summary judgment therefore should enter for the Trust on all five of its claims against EFR USA and EFR White Mesa.

Respectfully submitted this 27th day of April, 2016.

/s/ Aaron M. Paul

Aaron M. Paul (*pro hac vice*)

Neil Levine (*pro hac vice*)

Anne Mariah Tapp (*pro hac vice*)

Grand Canyon Trust

4454 Tennyson St.

Denver, Colorado 80212

Travis Stills (*pro hac vice*)

Energy and Conservation Law

1911 Main Avenue Suite 238

Durango, Colorado 81301

Joro Walker, Esq., USB # 6676

Western Resource Advocates

150 South 600 East, Ste. 2A

Salt Lake City, Utah 84102

Attorneys for Plaintiff

*Grand Canyon Trust*

**CERTIFICATE OF SERVICE**

I hereby certify that on this 27th day of April, 2016, I electronically filed the foregoing **GRAND CANYON TRUST'S MOTION FOR SUMMARY JUDGMENT AGAINST ENERGY FUELS RESOURCES (USA) INC. AND EFR WHITE MESA LLC** with the Clerk of the Court using the CM/ECF system which will send notification of such filing to the following e-mail addresses:

Michael A. Zody  
Jacob A. Santini  
PARSONS BEHLE & LATIMER  
201 S. Main St. Ste. 1800  
PO BOX 45898  
Salt Lake City, UT 84145-0898  
(801) 532-1234  
MZody@parsonsbehle.com  
JSantini@parsonsbehle.com

/s/ Aaron M. Paul

Aaron M. Paul